

U.S. DEPARTMENT OF COMMERCE
National Technical Information Service
PB-290 295

Air Pollution Regulations in State Implementation Plans: Virginia

Abcor Inc, Wilmington, MA Walden Div

Prepared for

Environmental Protection Agency, Research Triangle Park, NC

Aug 78

PB 290295

United States
Environmental Protection
Agency

Office of Air Quality
Planning and Standards
Research Triangle Park NC 27711

EPA-450/3-78-096
August 1978

Air



Air Pollution Regulations in State Implementation Plans: Virginia

REPRODUCED BY
NATIONAL TECHNICAL
INFORMATION SERVICE
U. S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA. 22161

TECHNICAL REPORT DATA (Please read instructions on the reverse before completing)		
1. REPORT NO. EPA-450/3-78-096	2.	3. RECIPIENT'S ACCESSION NO. PB 290295
4. TITLE AND SUBTITLE Air Pollution Regulations in State Implementation Plans: Virginia	5. REPORT DATE August 1978	6. PERFORMING ORGANIZATION CODE
7. AUTHOR(S)	8. PERFORMING ORGANIZATION REPORT NO.	
9. PERFORMING ORGANIZATION NAME AND ADDRESS Walden Division of Abcor, Inc. Wilmington, Mass.	10. PROGRAM ELEMENT NO.	
	11. CONTRACT/GRANT NO. 68-02-2890	
12. SPONSORING AGENCY NAME AND ADDRESS Control Programs Development Division Office of Air Quality Planning and Standards Office of Air, Noise, and Radiation Research Triangle Park, NC 27711	13. TYPE OF REPORT AND PERIOD COVERED	
	14. SPONSORING AGENCY CODE	
15. SUPPLEMENTARY NOTES EPA Project Officer: Bob Schell, Control Programs Development Division		
16. ABSTRACT This document has been produced in compliance with Section 110(h)(1) of the Clean Air Act amendments of 1977. The Federally enforceable regulations contained in the State Implementation Plans (SIPs) have been compiled for all 56 States and territories (with the exception of the Northern Mariana Islands). They consist of both the Federally approved State and/or local air quality regulations as indicated in the Federal Register and the Federally promulgated regulations for the State, as indicated in the Federal Register. Regulations which fall into one of the above categories as of January 1, 1978, have been incorporated. As mandated by Congress, this document will be updated annually. State and/or local air quality regulations which have not been Federally approved as of January 1, 1978, are not included here; omission of these regulations from this document in no way affects the ability of the respective Federal, State, or local agencies to enforce such regulations.		
17. KEY WORDS AND DOCUMENT ANALYSIS		
a. DESCRIPTORS Air pollution Federal Regulations Pollution State Implementation Plans	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
18. DISTRIBUTION STATEMENT RELEASE UNLIMITED	19. SECURITY CLASS (This Report) Unclassified	21. NO. OF PAGES 214
	20. SECURITY CLASS (This page) Unclassified	22. PRICE A10 PC MF A01 A01

EPA-450/3-78-096 Air Pollution Regulations in State Implementation Plans: Virginia

EPA-450/3-78-096

Air Pollution Regulations in State Implementation Plans:

Virginia

by

Walden Division of Abcor, Inc.
Wilmington, Massachusetts

Contract No. 68-02-2890

EPA Project Officer: Bob Schell

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Air, Noise, and Radiation
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

August 1978

ib

This report is issued by the Environmental Protection Agency to report air pollution regulations of interest to a limited number of readers. Copies are available, for a fee, from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

This report was furnished to the Environmental Protection Agency by Walden Division of Abcor, Inc., Wilmington, Mass. 01887, in fulfillment of Contract No. 68-02-2890. The contents of this report are reproduced herein as received from Walden Division of Abcor, Inc. The opinions, findings, and conclusions expressed are those of the author and not necessarily those of the Environmental Protection Agency. Mention of company or product names is not to be considered as an endorsement by the Environmental Protection Agency.

Publication No. EPA-450/3-78-096

INTRODUCTION

This document has been produced in compliance with Section 110(h)(1) of the Clean Air Act Amendments of 1977. The Federally enforceable regulations contained in the State Implementation Plans (SIPs) have been compiled for all 56 States and territories (with the exception of the Northern Mariana Islands). They consist of both the Federally approved State and/or local air quality regulations as indicated in the Federal Register and the Federally promulgated regulations for the State, as indicated in the Federal Register. Regulations which fall into one of the above categories as of January 1, 1978, have been incorporated. As mandated by Congress, this document will be updated annually. State and/or local air quality regulations which have not been Federally approved as of January 1, 1978, are not included here; omission of these regulations from this document in no way affects the ability of the respective Federal, State, or local agencies to enforce such regulations.

There have been recent changes in the Federal enforceability of parking management regulations and indirect source regulations. The October, 1977, appropriation bill for EPA prohibited Federal enforcement of parking management regulations in the absence of specific Federal authorizing legislation. Federally promulgated parking management regulations have, therefore, been suspended indefinitely. Pursuant to the 1977 Clean Air Act Amendments, indirect source regulations may not be required for the approval of a given SIP. Consequently, any State adopted indirect source regulations may be suspended or revoked; State adopted indirect source regulations contained in an applicable SIP are Federally enforceable. More importantly, EPA may only promulgate indirect source review regulations which are specific to Federally funded, operated, or owned facilities or projects. Therefore, the Federally promulgated indirect source regulations appearing in this document are not enforceable by EPA except as they relate to Federal facilities.

Since State air quality regulations vary widely in their organization, content, and language, a standardized subject index is utilized in this document. Index listings consist of both contaminant and activity oriented categories to facilitate usage. For example, for regulations which apply to copper smelters, one might look under sulfur compounds (50.2), particulate matter process weight (50.1.1), or copper smelters (51.15). Federal regulations pertaining to a given State immediately follow the approved State and local regulations.

Additionally, a summary sheet of the information included in each comprehensive document is presented prior to the regulatory text to allow one to quickly assess the contents of the document. Specifically, the summary sheets contain the date of submittal to EPA of each revision

to the SIP and the date of the Federal Register in which the revision was either approved or disapproved by EPA. Finally, a brief description or reference of the regulation which was submitted is also included.

This document is not intended to provide a tool for determining the enforceability of any given regulation. As stated above, it is intended to provide a comprehensive compilation of those regulations which are incorporated directly or by reference into Title 40, Part 52, of the Code of Federal Regulations. Consequently, the exclusion of a Federally approved regulation from this document does not diminish the enforceability of the regulation. Similarly, the inclusion of a given regulation (for example, regulations governing pollutants, such as odors, for which there is no national ambient air quality standards) in this document does not, in itself, render the regulation enforceable.

SUMMARY SHEET
OF
EPA-APPROVED REGULATION CHANGES

VIRGINIA

<u>Submittal Date</u>	<u>Approval Date</u>	<u>Description</u>
5/4/72	5/31/72	Section II (2.01, 2.04, 2.06); Rules 4, 5, 7, & 10
6/30/72	7/27/72	Section I, II, IV For State; Section I, II & IV For Nat. Cap.
7/26/72	5/14/73	Section 4.705.05 For Nat. Cap.
2/12/74	11/26/74	Section 3.703 For Nat. Cap.
2/12/74	11/13/74	Deletion To Preface For State & Nat. Cap.
8/14/75	11/9/77	Section 205(a) Re-Places 2.01(f).

FEDERAL REGULATIONS

<u>Section No.</u>	<u>Description</u>
52.2427	Regulation For Source Surveillance
52.2435	Compliance Schedules
52.2438	Gasoline Transfer Vapor Control
52.2439	Control of Evaporative Losses From the Filling of Vehicular Tanks.

<u>Section No.</u>	<u>Description</u>
52.2440	Control of Dry Cleaning Solvent Evaporation
52.2441	Inspection and Maintenance Program
52.2442	Bicycle Lanes and Bicycle Storage Facilities
52.2443	Management of Parking Supply (Suspended Indefinitely)
52.2444	Medium Duty Air/Fuel Control Retrofit
52.2445	Heavy Duty Air/Fuel Control Retrofit
52.2446	Oxidizing Catalyst Retrofit
52.2447	Vacuum Spark Advance Disconnect Retrofit
52.2448	Regulation For Review of New or Modified Indirect Sources
52.2451	Prevention of Significant Deterioration

DOCUMENTATION OF CURRENT EPA-APPROVED
STATE AIR POLLUTION REGULATIONS

REVISED STANDARD SUBJECT INDEX

- 1.0 DEFINITIONS
- 2.0 GENERAL PROVISIONS AND ADMINISTRATIVE PROCEDURES
- 3.0 REGISTRATION CERTIFICATES, OPERATING PERMITS AND APPLICATIONS
- 4.0 AIR QUALITY STANDARDS (PRIMARY AND SECONDARY)
 - 4.1 PARTICULATES
 - 4.2 SULFUR DIOXIDE
 - 4.3 NITRIC OXIDES
 - 4.4 HYDROCARBONS
 - 4.5 CARBON MONOXIDE
 - 4.6 OXIDANTS
 - 4.7 OTHERS
- 5.0 VARIANCES
- 6.0 COMPLIANCE SCHEDULES
- 7.0 EQUIPMENT MALFUNCTION AND MAINTENANCE
- 8.0 EMERGENCY EPISODES
- 9.0 AIR QUALITY SURVEILLANCE AND SOURCE TESTING
- 10.0 NEW SOURCE PERFORMANCE STANDARDS
- 11.0 NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS
- 12.0 MOTOR VEHICLE EMISSIONS AND CONTROLS
- 13.0 RECORD KEEPING AND REPORTING
- 14.0 PUBLIC AVAILABILITY OF DATA
- 15.0 LEGAL AUTHORITY AND ENFORCEMENT
- 16.0 HEARINGS, COMPLAINTS, AND INVESTIGATIONS
- 17.0 PREVENTION OF SIGNIFICANT DETERIORATION
- 18.0 AIR QUALITY MAINTENANCE AREA
- 19.0 - 49.0
RESERVED FOR FUTURE EXPANSION OF COMMON INDEX
- 50.0 POLLUTANT - SPECIFIC REGULATIONS
 - 50.1 PARTICULATES
 - 50.1.1 PROCESS WEIGHT
 - 50.1.2 VISIBLE EMISSIONS
 - 50.1.3 GENERAL

- 50.2 SULFUR COMPOUNDS
- 50.3 NITRIC OXIDES
- 50.4 HYDROCARBONS
- 50.5 CARBON MONOXIDE
- 50.6 ODOROUS POLLUTANTS
- 50.7 OTHERS (Pb, Hg, etc.)
- 51.0 SOURCE CATEGORY SPECIFIC REGULATIONS
 - 51.1 AGRICULTURAL PROCESSES (includes Grain Handling, Orchard Heaters, Rice and Soybean Facilities, Related Topics)
 - 51.2 COAL OPERATIONS (includes Cleaning, Preparation, Coal Refuse Disposal Areas, Coke Ovens, Charcoal Kilns, Related Topics)
 - 51.3 CONSTRUCTION (includes Cement Plants, Materials Handling, Topics Related to Construction Industry)
 - 51.4 FERROUS FOUNDRIES (includes Blast Furnaces, Related Topics)
 - 51.5 FUEL BURNING EQUIPMENT (coal, natural gas, oil) - Particulates (includes Fuel Content and Other Related Topics)
 - 51.6 FUEL BURNING EQUIPMENT (coal, natural gas, oil) - SO₂ (includes Fuel Content and Other Related Topics)
 - 51.7 FUEL BURNING EQUIPMENT (oil, natural gas, coal) - NO₂ (includes Fuel Content and Other Related Topics)
 - 51.8 HOT MIX ASPHALT PLANTS
 - 51.9 INCINERATION
 - 51.10 NITRIC ACID PLANTS
 - 51.11 NON-FERROUS SMELTERS (Zn, Cu, etc.) - Sulfur Dioxide
 - 51.12 NUCLEAR ENERGY FACILITIES (includes Related Topic)
 - 51.13 OPEN BURNING (includes Forest Management, Forest Fire, Fire Fighting Practice, Agricultural Burning and Related Topics)
 - 51.14 PAPER PULP; WOOD PULP AND KRAFT MILLS (includes Related Topics)
 - 51.15 PETROLEUM REFINERIES
 - 51.16 PETROLEUM STORAGE (includes Loading, Unloading, Handling and Related Topics)
 - 51.17 SECONDARY METAL OPERATIONS (includes Aluminum, Steel and Related Topics)
 - 51.18 SULFURIC ACID PLANTS
 - 51.19 SULFURIC RECOVERY OPERATIONS
 - 51.20 WOOD WASTE BURNERS
 - 51.21 MISCELLANEOUS TOPICS

TABLE OF CONTENTS

STATE REGULATIONS

<u>Revised Standard Subject Index</u>	<u>Section Number</u>	<u>Title</u>	<u>Page</u>
--	Section I	--	1
(1.0)	1.700	Definitions	1
--	Section II	--	10
(2.0)	2.700	Procedures	10
(2.0)	2.701	Regulations	10
(2.0)	2.702	Local Ordinances	12
(3.0)	2.703	Registration	14
(6.0)	2.704	Date of Compliance	14
(2.0)	2.705	Action on Control Programs	14
(3.0)	2.706	Permit to Construct and/or Modify and Operate	15
(13.0)	2.707	Monitoring, Records, Reporting	18
(9.0)	2.708	Sampling and Testing Methods	18
(7.0)	2.709	Reporting of Control Equipment Maintenance or Malfunction	18
(2.0)	2.710	Circumvention	19
(2.0)	2.711	Severability	19
--	Section III	--	20
(4.0)	3.700	Air Quality Standards	20
(2.0)	3.701	General Provisions	20

<u>Revised Standard Subject Index</u>	<u>Section Number</u>	<u>Title</u>	<u>Page</u>
(4.1)	3.702	Particulate Matter	20
(4.2)	3.703	Sulfur Oxides (Sulfur Dioxide)	20
(4.5)	3.704	Carbon Monoxide	21
(4.6)	3.705	Photochemical Oxidants	21
(4.4)	3.706	Hydrocarbons	21
(4.3)	3.707	Nitrogen Dioxide	22
(4.1)	3.708	Dustfall	22
--	Section IV	--	23
(51.13)	4.701.00	Open Burning	23
(51.13)	4.701.01	Prohibition of Open Burning	23
(2.0)	4.701.02	Exceptions	23
(2.0)	4.701.03	Exclusions	24
(50.1.2)	4.702.00	Smoke and Other Visible Emissions - Stationary Sources	25
(50.1)	4.702.01	Particulates of Smoke or Other Visible Emissions	25
(2.0)	4.702.02	Exceptions	25
(2.0)	4.702.03	Traffic Hazard	25
(51.5)	4.703.00	Particulate Emission From Existing Fuel Burning Equipment	26
(51.5)	4.703.01	Emission Standards for Furnaces	26

<u>Revised Standard Subject Index</u>	<u>Section Number</u>	<u>Title</u>	<u>Page</u>
(9.0)	4.703.02	Emission Testing	26
(2.0)	4.703.03	Exemptions	27
(2.0)	4.703.04	Bacharach Standard	27
(50.1)	4.704.00	Particulate Matter	28
(50.1)	4.704.01	Restriction of Emission of Particulate Matter	28
(50.1.3)	4.704.02	Control of Fugitive Parti- culate Matter	28
(50.0)	4.705.00	Gaseous Contaminants	32
(50.0)	4.705.01	Prohibition of Gaseous Contaminant Emissions	32
(50.2)	4.705.02	Sulfur Containing Gases and Compounds	32
(51.16)	4.705.03	Control of Hydrocarbon Emissions From Stationary Sources	32
(51.16)	4.705.04	Control of Carbon Monoxide Emissions	40
(51.10) (51.7)	4.705.05	Control of Nitrogen Oxides Emissions	40
(50.6)	4.706.00	Odor	45
(2.0)	4.706.01	Scope	45
(50.6)	4.706.02	Prohibition of Objectionable Odor	45
(2.0)	4.706.03	Determination of Violation	45
(2.0)	4.706.04	Exception	45

<u>Revised Standard Subject Index</u>	<u>Section Number</u>	<u>Title</u>	<u>Page</u>
(51.9)	4.707.00	Incinerators	46
(51.9)	4.707.01	Prohibition of Smoke, Particulates and Odor Emissions From Incinerators	46
(2.0)	4.707.02	Determination of Violation	46
(51.9)	4.707.03	Emissions Standards for Existing Incinerators	46
(51.9)	4.707.04	Flue-Fed Incinerators	46
(9.0)	4.707.05	Emission Testing	46
(12.0)	4.710.00	Mobile Source Emissions	48
(12.0)	4.710.01	Prohibition of Acts Affect- ing Emissions From Motor Vehicles	48
(12.0)	4.710.02	Visible Emission for Mobile Source	48
(2.0)	4.710.03	Determination of Violations	49
--	Section VI	--	50
(8.0)	6.700	Air Pollution Emergency Episode	50
(2.0)	6.701	General Requirements	50
(8.0)	6.703	Standby Emission Reduction Plans	54
(2.0)	6.704	Control Requirements	55
(2.0)	6.705	Participation of Local Air Pollution Control Offices	56

VIRGINIA STATE REGULATIONS EXCEPT NATIONAL CAPITAL

<u>Revised Standard Subject Index</u>	<u>Section Number</u>	<u>Title</u>	<u>Page</u>
--	Section I	--	67
(1.0)	1.00	Definitions	67
--	Section II	--	76
(2.0)	2.00	Procedures	76
(2.0)	2.01	Regulations	76
(2.0)	2.02	Local Ordinances	78
(3.0)	2.03	Registration	79
(6.0)	2.04	Date of Compliance	79
(2.0)	2.05	Action on Control Programs	80
(3.0)	2.06	Permit to Construct and/or Modify and Operate	81
(13.0)	2.07	Monitoring, Records Reporting	83
(9.0)	2.08	Sampling and Testing Methods	84
(7.0)	2.09	Reporting of Control Equip- ment Maintenance or Malfunction	84
(2.0)	2.10	Circumvention	85
(2.0)	2.11	Severability	85
--	Section III	--	86
(4.0)	3.00	Air Quality	86
(2.0)	3.01	General Provisions	86
(4.1)	3.02	Particulate Matter	86

<u>Revised Standard Subject Index</u>	<u>Section Number</u>	<u>Title</u>	<u>Page</u>
(4.2)	3.03	Sulfur Oxides (Sulfur Dioxide)	87
(4.5)	3.04	Carbon Monoxide	87
(4.6)	3.05	Photochemical Oxidants	87
(4.4)	3.06	Hydrocarbons	88
(4.3)	3.07	Nitrogen Dioxide	88
(4.1)	3.08	Dustfall	88
--	Section IV	--	89
(51.13)	4.01.00	Open Burning	89
(51.13)	4.01.01	Prohibition of Open Burning	89
(2.0)	4.01.02	Exceptions	89
(2.0)	4.01.03	Exclusion	92
(50.1.2)	4.02.00	Smoke or Other Visible Emissions - Stationary Sources	93
(50.1.2)	4.02.01	Prohibition of Smoke or Other Visible Emissions	93
(2.0)	4.02.02	Exceptions	93
(2.0)	4.02.03	Traffic Hazard	93
(51.5)	4.03.00	Particulate Emission From Existing Fuel Burning Equipment	94
(51.5)	4.03.01	Emission Standards for Furnaces	94
(9.0)	4.03.02	Emission Testing	94

<u>Revised Standard Subject Index</u>	<u>Section Number</u>	<u>Title</u>	<u>Page</u>
(2.0)	4.03.03	Exemptions	95
(50.1.1)	4.04.00	Particulate Matter	97
(50.1.1)	4.04.01	Restriction of Emission of Particulate Matter From Manufacturing Operation	97
(50.1)	4.04.02	Control of Fugitive Dust	105
(50.0)	4.05.00	Gaseous Contaminants	106
(50.0)	4.05.01	Prohibition of Gaseous Contaminant Emissions	106
(50.2)	4.05.02	Sulfur Containing Gases and Compounds	106
(50.4)	4.05.03	Control of Hydrocarbon Emissions From Stationary Sources	109
(50.5)	4.05.04	Control of Carbon Monoxide Emissions	115
(50.3)	4.05.05	Control of Nitrogen Oxides Emissions	116
(50.6)	4.06.00	Odor	117
(2.0)	4.06.01	Scope	117
(50.6)	4.06.02	Prohibition of Objectionable Odor	117
(2.0)	4.06.03	Determination of Violation	117
(2.0)	4.06.04	Exception	117
(51.9)	4.07.00	Incinerators	118
(51.9)	4.07.01	Prohibition of Smoke, Parti- culates and Odor Emissions From Incinerators	118

<u>Revised Standard Subject Index</u>	<u>Section Number</u>	<u>Title</u>	<u>Page</u>
(2.0)	4.07.02	Determination of Violation	118
(51.9)	4.07.03	Emission Standards for Existing Incinerators	118
(51.9)	4.07.04	Flue-Fed Incinerators	118
(9.0)	4.07.05	Emission Testing	118
(51.2)	4.08.00	Coal Refuse Disposal Areas	119
(2.0)	4.08.01	Purpose	119
(51.2)	4.08.02	Operation of New Coal Refuse Areas Prohibited Without Prior Approval	119
(51.2)	4.08.03	Operation of Existing Coal Refuse Disposal Areas Prohibited Without Approval	119
(51.2)	4.08.04	Guideline for Approval of Coal Refuse Disposal Areas	119
(51.2)	4.08.05	Deliberate Ignition of a Coal Refuse Disposal Area is Prohibited	122
(51.2)	4.08.06	Burning Coal Refuse Disposal Areas	122
(2.0)	4.08.07	Exceptions	122
(51.2)	4.09.00	Coke Ovens and Charcoal Kilns	123
(51.2)	4.09.01	Beehive Coke Ovens	123
(51.2)	4.09.02	Other By-Product Coke Ovens	123
(51.2)	4.09.03	Charcoal Kilns	123
(12.0)	4.10.00	Mobile Source Emissions	124
(12.0)	4.10.01	Prohibition of Acts Affecting Emissions From Motor Vehicles	124

<u>Revised Standard Subject Index</u>	<u>Section Number</u>	<u>Title</u>	<u>Page</u>
(12.0)(50.1.2)	4.10.02	Visible Emission for Mobile Source	124
(2.0)	4.10.03	Determination of Violations	125
--	Section VI	--	126
(8.0)	6.00	Air Pollution Emergency Episode	126
(2.0)	6.01	General Requirements	126
(8.0)	6.03	Standby Emission Reduction Plans	130
(2.0)	6.04	Control Requirements	131
(2.0)	6.05	Participation of Local Air Pollution Control Offices	132

FEDERALLY PROMULGATED REGULATIONS

<u>Revised Standard Subject Index</u>	<u>Section Number</u>	<u>Title</u>	<u>Page</u>
(9.0)	52.2427	Source Surveillance	142
(8.0)	52.2435	Compliance Schedules	145
(12.0)	52.2438	Gasoline Transfer Vapor Control	147
(12.0)	52.2439	Control of Evaporative Losses From the Filling of Vehicular Tanks	150
(50.4)	52.2440	Control of Dry Cleaning Solvent Evaporation	153
(12.0)	52.2441	Inspection and Maintenance Program	155
(12.0)	52.2442	Bicycle Lanes and Bicycle Storage Facilities	157
(12.0)	52.2443	Management of Parking Supply	159
(12.0)	52.2444	Medium Duty Air/Fuel Control Retrofit	162
(12.0)	52.2445	Heavy Duty Air/Fuel Control Retrofit	164
(12.0)	52.2446	Oxidizing Catalyst Retrofit	166
(12.0)	52.2447	Vacuum Spark Advance Disconnect Retrofit	168
(10.0)	52.2448	Review of New or Modified Indirect Sources	171
(17.0)	52.2451	Prevention of Significant Deterioration	181

AQCR VII
SECTION I

(1.0) 1.700 DEFINITIONS

1.701 Certain Terms Defined.

For the purpose of subsequent rules and regulations adopted or orders issued by the State Air Pollution Control Board under the provisions of Chapter 1.2, Title 10, Code of Virginia of 1950, as amended, the following additional words or terms shall have the meanings indicated:

AIR POLLUTION. The presence in the outdoor atmosphere of one or more substances which are or may be harmful or injurious to human health, welfare or safety, to animal or plant life, or to property, or which unreasonably interfere with the enjoyment by the people of life or property.

AIR POLLUTION EMERGENCY EPISODE. Meteorological conditions, generally temperature inversion, that reduces the effective volume of air in which the contaminants are diluted and as a result air pollution may reach levels that would cause imminent and substantial endangerment to the health of persons.

AIR POLLUTION CONTROL OFFICER. The agent or official of the local government designated by the governing body to enforce the local air pollution control ordinance within the local jurisdiction, or designated representatives of the State Board. Sometimes referred to as "Control Officer."

AIR QUALITY. The specific measurement in the ambient air of a particular air contaminant at any given time.

AIR TABLE. A source consisting of a device using a gaseous separating medium for the primary purpose of improving the product quality.

AMBIENT AIR. The surrounding or outside air.

AMBIENT AIR QUALITY STANDARD - PRIMARY. Air quality which, allowing an adequate margin of safety, is requisite to protect the public health.

AMBIENT AIR QUALITY STANDARD - SECONDARY. Air quality which is requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of air contaminants in the ambient air.

AREA SOURCE. Any small residential, governmental, institutional, commercial, or industrial fuel combustion operations; onsite waste disposal facility; motor vehicle, air craft, vessels, or other transportation facilities, or other miscellaneous sources.

BACHARACH SCALE. A graduated scale of shades of gray going from 0 through 10, with 0 being white and 10 being dense black, developed by the Bacharach Industrial Instrument Company and used to evaluate particulate matter in flue gas samples-

BEEHIVE COKE OVEN. A source consisting of an arched, beehive-shaped, oven in which heat is supplied by partial combustion of the coal within the oven chambers and in which destructive distillation of coal occurs with no recovery of by-products.

BOARD. The State Air Pollution Control Board, sometimes hereinafter referred to as "Board" or "State Board."

BY-PRODUCT COKE PLANT. A source consisting of a plant, oven or device used in connection with the distillation process to produce coke. Such plant consists of, but is not limited to, coal and coke handling equipment, by-product chemical plant and other equipment associated with and attendant to the coking chambers or ovens making up a single battery operated and controlled as a single unit.

CHEMICAL FERTILIZER. A compound or mixture whose chief ingredients are nitrogen, phosphorous, or potassium; or any combination of these ingredients, and having agronomic value.

COAL PREPARATION. A source consisting of, but not limited to, coal crushing, screening, washing, drying and air separation operations used for the purpose of preparing the product for marketing.

COAL REFUSE. Any waste coal, rock, shale, culm, boney, slate, clay and related materials, associated with or near a coal seam, which are either brought above ground or otherwise removed from the mine in the process of mining coal, or which are separated from coal during the cleaning or preparation operations, provided, however, that coal refuse shall not mean overburden from strip mining operations or rock from mine shafts and mine tunnels.

COAL REFUSE DISPOSAL AREA. Any source or potential source consisting of any area or plot of land used as a place for dumping, storage, or disposal of coal refuse. A coal refuse pile must be contained in a single coal refuse disposal area; however, a coal refuse disposal area may contain two or more coal refuse piles if the area is so designated.

COAL REFUSE PILE. Any source consisting of any deposit of coal refuse on or buried in the earth and intended as permanent disposal of or long-term storage of such material. Continuous deposits of coal refuse and deposits not separated by an approved method shall be considered as a single coal refuse pile.

COMBUSTION INSTALLATION. A source consisting of any furnace, oven, kiln, incinerator, fuel burning equipment, or any other stationary equipment in which solid, liquid, or gaseous materials are burned.

COMMENCING NEW SOURCE. Any substantial financial commitment relating to the design criteria concerning preparation of a new site, or the beginning of a modification. (See definition of Existing Source, Modification and New Source.)

CONSTRUCTION. Fabrication, erection, or installation of a source.

CONTAMINANT. Smoke, dust, soot, grime, carbon, or any other particulate matter, radioactive matter, noxious gas, acids, fumes, gases, odor, vapor, or any combination thereof.

CONTROL PROGRAM. Control program submitted to the Board, voluntarily or upon request of the Board, by the owner of an existing and/or proposed new source, to establish pollution abatement goals and time schedules to achieve such goals, so as to ensure compliance by the owner with standards, policies and regulations adopted by the Board. In accordance with Section 10-17.21 of the Air Pollution Control Law of Virginia the control program will include such system and equipment information and projected operating performance as is required by the Board for evaluation of the probability of achieving goals of the control program.

DIRECTOR. The Director or Executive Secretary of the State Air Pollution Control Board.

DUST. Solid particles projected into the air by natural forces, such as wind, volcanic eruption, or earthquake, and by mechanical or man-made processes such as crushing, grinding, milling, drilling, demolition, shoveling, conveying, screening, bagging, and sweeping.

EFFLUENT WATER SEPARATOR. Any source consisting of any tank, box, sump, or other container in which any volatile organic compound floating on or entrained or contained in water entering such tank, box, sump, or other container is physically separated and removed from such water prior to outfall, drainage, or recovery of such water.

EXISTING SOURCE. Any source which is in being or is defined as a commencing new source on the effective date of these regulations or on which construction or modification has been commenced; except that any such existing source or any emission point from such existing source

(where such source involves multiple emission points) which is modified after the effective date of these regulations shall be reclassified as a "new source." (See definition of Commencing New Source or Modification, Modification, and New Source.)

FLY ASH. Particulate matter capable of being gas-borne or air-borne and consisting of fused ash and partially burned or unburned fuel or other material from a combustion installation.

FOUNDRY CUPOLA. A shaft type furnace used for melting of metals, consisting of, but not limited to, furnace proper, tuyeres, fans, or blowers, tapping spout, charging equipment, gas cleaning devices and other auxiliaries.

FOUNDRY OPEN HEARTH. A furnace in which the melting and refining of metal is accomplished by the application of heat to a saucer type or shallow hearth in a closed chamber, consisting of, but not limited to, the furnace proper, checkers, flues, and stacks and other auxiliaries.

FUEL-BURNING EQUIPMENT. A source consisting of any furnace, and all appurtenances thereto, used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat transfer.

FUGITIVE DUST. Solid airborne particulate matter or dust emitted from any source other than a flue or stack.

FUMES. Minute particulate matter generated by the condensation of vapors from solid matter after volatilization from the molten state, or generated by sublimation, distillation, calcination or chemical reaction when these processes create airborne particles.

FURNACE. An enclosed space provided for combustion.

GASOLINE. Any petroleum distillate having a Reid vapor pressure in the range of four (4) to fifteen (15) pounds at 100 degrees F.

GASES. Formless fluids which, under standard conditions, occupy the space of enclosure and which can be changed to the liquid or solid state only by the combined effect of increased pressure and decreased temperature.

HAZARDOUS AIR CONTAMINANT. An air contaminant to which no ambient air quality standard is applicable and which may cause, or contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness.

HEATING VALUE. The heat released by combustion of one pound of fuel or other material measured in British Thermal Units (BTU) on an as received basis.

INCINERATOR. Any source consisting of a furnace and all appurtenances thereto designed for the destruction of refuse by burning. "One Burning" is not considered incineration. For purposes of these rules, the destruction of any combustible liquid or gaseous material by burning in a flare or flare stack shall be considered incineration.

MANUFACTURING OPERATION. Any source consisting of any process or combination of physically connected dissimilar processes which is operated to effect physical and/or chemical changes in an article.

MATERIALS HANDLING EQUIPMENT. Any source consisting of any equipment used as a part of a process or combination of processes which does not effect a physical or chemical change in the material or in an article, such as, but not limited to, conveyors, elevators, feeders, or weighers.

MELT TIME. The time in which the metal is melting and available at the spout or tap hole, excluding any time the equipment is idle, preheating or preparing for shutdown.

MIST. A state of atmospheric obscurity produced by suspended liquid droplets.

MOBILE SOURCES. Any vehicle, including, but not limited to any vehicle, truck, or other land craft, air craft, locomotive, bus or ship, rail vehicle, or water craft, which emits or may emit any air contaminant.

MODIFICATION. Any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air contaminant (to which a standard applies) emitted by such source or which results in the emission of any air contaminant (to which a standard applies) not previously emitted, except that:

- (1) Routine maintenance, repair and replacement shall not be considered physical changes, and
- (2) The following shall not be considered a change in the method of operation:
 - (i) A change in the production rate, if such change does not increase the emission of contaminants (to which a standard applies) or which results in the emission of contaminants (to which a standard applies) not previously emitted;

- (ii) An increase in hours of operation;
- (iii) Use of an alternative fuel or raw material if prior to the date of these regulations the source was designed to accomodate such alternative use. (See definition of Commencing New Source or Modification, Existing Source, and New Source.)

MOTOR VEHICLE. Any powered conveyance normally licensed by the Virginia Division of Motor Vehicles.

NEW SOURCE. Any source the construction or modification of which is commenced on or after the effective date of these regulations; or for the specific stationary sources covered by the "Federal Standards of Performance for New Stationary Sources," the date promulgated will apply; and any source relocated from an approved site. (See definition of Commencing New Source or Modification, Existing Source, and Modification.)

ODOR. The sensation resulting from stimulation of the human sense of smell.

OPACITY. The characteristic of a substance which renders it partially or wholly impervious to rays of light. Opacity as used herein generally refers to the obscurity of an observer's view.

OPEN BURNING. The burning of any matter in such a manner that the products of combustion resulting from the burning are emitted directly into the ambient air without passing through a stack, duct, or chimney.

OWNER. State, a county, sanitary district, municipality, political subdivision, a public or private institution, corporation, association, firm or company organized or existing under the laws of this or any other state or county, lessee, or person otherwise in possession of property, any person or individual, or group of persons or individuals, acting individually or as a group.

PARTICULATE MATTER. Any material, except water in uncombined form, that is airborne and exists as a liquid or a solid in the atmosphere. Particulate matter is sometimes hereinafter referred to as "particulate."

PERSON. Any individual, corporation, cooperative, partnership, firm, association, trust, estate, public or private institution, group, agency, political subdivision of this State or any legal successor, representative, agent or agency of the foregoing.

PHYSICALLY CONNECTED. Any combination of processes connected by materials handling equipment and designed for simultaneous complementary operation.

POINT SOURCE.

- (1) Any stationary source causing emissions in excess of 100 tons per year of any contaminant for which there is a national standard in a region containing an area whose 1970 "urban place" population, as defined by the U.S. Bureau of the Census, was equal to or greater than 1 million,
- (2) Any stationary source causing emissions in excess of 25 tons per year of any contaminant for which there is a national standard in a region containing an area whose 1970 "urban place" population, as defined by the U.S. Bureau of the Census, was less than 1 million,
- (3) Without regard to amount of emissions, stationary sources such as those listed in Appendix A.

PROCESS OPERATIONS. Any source consisting of any method, form, action, operation, or treatment of manufacturing or processing, and shall include any storage or handling of materials or products before, during or after manufacturing or processing.

PROCESS UNIT. Any step in a manufacturing operation which results in the emission of particulate matter to the atmosphere.

PROCESS WEIGHT. Total weight of all materials introduced into any source process unit which may cause any emissions of particulate matter. Process weight includes solid fuels charged, but does not include liquid and gaseous fuels charged or combustion air for all fuels.

PROCESS WEIGHT RATE. A rate established as follows:

- (a) For continuous or long-run steady-state source operations, the total process weight for the entire period of continuous operation or for a typical portion thereof, divided by the number of hours of such period or portion thereof.
- (b) For cyclical or batch unit operations, or unit processes, the total weight for a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period.

Where the nature of any process operation or the design of any equipment is such as to permit more than one interpretation of this definition, the interpretation which results in the minimum value for allowable emission shall apply.

PRODUCTION RATE. The weight of final product obtained per hour of operation. If the rate of product going to storage can vary, the production rate shall be determined by calculation from the feed rates of raw material.

REFUSE. Includes garbage, rubbish and trade wastes;

- (1) Garbage. Animal and vegetable matter such as that originating in houses, kitchens, restaurants, and hotels, produce markets, food service or processing establishments, greenhouses, and hospitals, clinics or veterinary facilities.
- (2) Rubbish. Solids not considered to be highly flammable or explosive such as, but not limited to, rags, old clothes, leather, rubber, carpets, wood excelsior, paper, ashes, tree branches, yard trimmings, furniture, metal food containers, glass, crockery, masonry, and other similar materials.
- (3) Trade Waste. All solid or liquid material resulting from construction, building operations, or the prosecution of any business, trade or industry such as, but not limited to, plastic products, chemicals, cinders and other forms of solid or liquid waste materials.

RINGELMANN CHART. A chart published as U.S. Bureau of Mines Information Circular 8333, dated May, 1967.

SALVAGE OPERATIONS. Any source consisting of any business, trade or industry engaged in whole or in part in salvaging or reclaiming any product or material, such as, but not limited to, reprocessing of used motor oils, metals, chemicals, shipping containers, or drums, and specifically including automobile graveyards and junkyards as defined in Sec. 33-279.3 of the Code of Virginia of 1950, as amended.

SCREENING EQUIPMENT. Any equipment or device designed or used for the purpose of effecting particle size separations of materials.

SMOKE. Small airborne particulate matter consisting predominantly but not exclusively of carbon, ash and other material in concentrations sufficient to form a visible plume.

SOILING INDEX. A measure of the soiling properties of suspended particles in air determined by drawing a measured volume of air through a known area of Whatman No. 4 filter paper for a measured period of time (normally two hours) expressed on COH's/100 linear feet.

SOURCE. Any and all points of origin of emission of air contaminants, whether privately or publicly owned or operated or person contributing to emission of air contaminants. Without limiting the generality of the foregoing, this term includes all types of business, commercial

and industrial plants, works, shops and stores, and heating and power plants or stations, buildings and other structures of all types.

STACK OR CHIMNEY. Any flue, conduit, or duct arranged to conduct emissions into the atmosphere.

STANDARD CONDITIONS. Dry gas temperature of 70 degrees Fahrenheit and a gas pressure of 14.7 pounds per square inch absolute.

STANDARD OF PERFORMANCE. Degree of air contaminant emission limitation achievable through the application of the best system of emission reduction which the Board determines has been adequately demonstrated.

STATIONARY SOURCE. Sources other than mobile sources.

SUBMERGED FILL PIPE. Any fill pipe the discharge opening of which is entirely submerged when the liquid level is 6 inches above the bottom of the tank; or when applied to a tank which is loaded from the side, shall mean that the fill pipe is adequately covered at all times during normal working of the tank.

SUPERPHOSPHATE. The product resulting from a controlled reaction between sulfuric acid and phosphate rock, and having agronomic value.

THERMAL DRIER. A device using fuel burning equipment for the primary purpose of reducing the moisture content of materials.

VOLATILE ORGANIC COMPOUND. Any compound, containing carbon and hydrogen or containing carbon and hydrogen in combination with any other element, which has a vapor pressure of 2.5 pounds per square inch absolute or greater under actual storage conditions. (Kerosene and fuel oil used for household heating have vapor pressures of less than 1.5 pounds per square inch absolute under actual storage conditions; therefore kerosene and fuel oil are not considered as Volatile Organic Compounds.)

Unless specifically defined in the Law or in the Regulations of the Board, the technical terms used by the Board have the meanings commonly ascribed to them by recognized authorities.

The defined terms included in this Section (1.00) are underlined in the Regulations to emphasize that the term has a defined meaning.

AQCR VII
SECTION II

(2.0) 2.700 Procedures

(2.0) 2.701 Regulations

(a) Establishment

Regulations for the control and abatement of air pollution are adopted, amended, or repealed only after:

- (1) Thorough study of the need and technical requirements by the Staff of the Board and, when required, by the State Technical Advisory Committee on Air Pollution.
- (2) Public hearing.
- (3) Thorough study of comments made by the public.
- (4) Adoption by the Board at a public meeting.

(b) Effective Date

No regulation, rule, amendment, or repeal will become effective until sixty days after adoption by the Board.

(c) Enforcement of Regulations

- (1) Whenever the Control Officer or his representative has reason to believe that a violation of any of the Regulations promulgated by the Board has occurred, notice shall be served on the alleged violator or violators, citing the Regulation involved and the facts on which the notice is based, and shall order that necessary corrective action be taken within a reasonable time. Such corrective action shall mean the cessation of the violation, or an agreement to proceed under an approved control program, or an application to the Board for a variance, or a combination of these actions as directed by the Executive Secretary. The Executive Secretary may act as the agent of the Board to obtain legal remedy should any owner fail to comply with such an order, pursuant to Sec. 10-17.23 of the Code of Virginia.
- (2) Nothing in this section shall prevent the Control Officer from making efforts to obtain voluntary compliance through conference, warning, or other appropriate means.

(d) Special Orders

The Board shall have the power to issue Special Orders pursuant to Sec. 10-17.18:1 of the Code of Virginia, as amended.

(e) Hearings

(1) Hearings by the Board may take either of the following forms:

- (i) The public hearing required before considering rules and regulations or before considering variances in accordance with Sec. 10-17.18(b) and (c) of the Code of Virginia of 1950 as amended.

A public hearing may be held in connection with a regular or special meeting of the Board. The procedure for a public hearing shall conform to Sec. 9-6.6 except as modified by Sec. 10-17.18(b) and (c) of the Code of Virginia, as amended.

- (ii) The formal hearing for the determination of violations and the enforcement or review of its orders, rules and regulations in accordance with Sec. 10-17.18(d) of the Code of Virginia of 1950 as amended.

A formal hearing shall be conducted as part of the business of a regular or special meeting of the Board. The procedure for a formal hearing shall conform to Sec. 9-6.10 through 9-6.12 except as modified by Sec. 10-17.18(d) of the Code of Virginia as amended.

(2) Record of the Hearings by the Board may take any of the following forms:

- (i) Oral statements or testimony at any hearing may be stenographically or electronically recorded for transcription to written form.

- (ii) Formal hearings will be recorded by a court reporter.

(3) Availability of Record of the Hearings by the Board

- (i) A copy of the transcript of public hearing, if transcribed, will be provided within a reasonable time to any person upon written request and payment of the cost; if not transcribed, cost of preparation will be borne by person making request.

- (ii) Any person desiring a copy of the transcript of formal hearings recorded by a court reporter may make arrangements directly with the court reporter to purchase such copies.

(f) Variances

Pursuant to Sec. 10-17.18(c) of the Code of Virginia of 1950, as amended, the Board may in its discretion grant local variances to any regulation adopted by the Board pursuant to Sec. 10-17.18(b) if it finds after a thorough investigation and hearing that local conditions warrant provided that:

- (1) The emission occurring or proposed to occur does not endanger human health, welfare, and safety or
- (2) Compliance with the regulations from which variance is sought would produce serious hardship without equal or greater benefits to the public or
- (3) The emission occurring will not promote or encourage any substantial degradation of ambient air quality. Notices of public hearings on applications for variances shall be advertised at least fifteen days prior to the date of the hearing. Variances will be granted for a limited period of time -- normally such a period is not to be greater than a year. The Board may renew variances beyond one year only after a thorough investigation and a public hearing has determined that the circumstances which created a variance situation continue to exist.

(2.0) 2.702 Local Ordinances

(a) Ordinances

The governing body of any locality proposing to adopt an ordinance, or an amendment to an existing ordinance, relating to air pollution shall first obtain the approval of the Board as to the provisions of any such ordinance or amendment. The provisions of any such ordinance must be as strict as the State or regional regulations, whichever is applicable. The Board in approving local ordinances will consider such factors as, but not limited to,:

- (1) The local ordinance must provide for intergovernmental cooperation and exchange of information.
- (2) Information must be provided giving local resources which will be committed to the enforcement of the proposed local

ordinance and those resources committed must be reasonably adequate to achieve the goals for which the ordinance is designed.

Approval of any local ordinance may be withdrawn if the Board determines that the local ordinance is not as strict as State or regional regulations. Where an amendment to a State or regional regulation causes a local ordinance to be less strict a reasonable (but not more than 6 months) time will be allowed for the locality to amend its ordinance. A local governing body may grant a variance to any of its air pollution control ordinances providing a public hearing is held before doing so. Notice of public hearings on applications for variances must be advertised at least fifteen (15) days prior to the date of the hearing.

(b) Reports

Local ordinances will make provision for reporting to the Board such data as may be required in carrying out its responsibilities under the Code of Virginia of 1950, as amended, and the Clean Air Act. Such reports will include, but are not limited to: monitoring data, surveillance programs, procedures for investigation of complaints, variance hearings, and status of control programs.

(c) Relationship to State or Regional Regulations*

Local ordinances are a supplement to State or Regional Regulations which have been adopted, or may in the future be adopted or amended, by the Board in accordance with Section 10-17.18 and 10-17.30 of the Code of Virginia of 1950, as amended. Any provisions of local ordinances which have been approved by the Board and are more strict than the State or regional regulations shall take precedence over such regulations within the respective political subdivisions. It is the intention of the Board to coordinate activities among the enforcement officers of the various localities in the enforcement of State and regional regulations. The Board will also provide technical and other assistance to local authorities in the development of air quality or emission standards, in the investigation and study of air

* Air pollution control is a problem of balancing the equities involved for the total good of the community. An ill-conceived program to control air pollutant emissions might well be more damaging than the original problem. Any regulation should be sufficiently flexible to allow each community's needs to be served; therefore, it is intended that primary enforcement of these Regional Regulations should be at the local government level.

pollution problems, and in the enforcement of local ordinances and State and regional regulations.

The Board emphasizes its intention to assist in the local enforcement of local ordinances. The Board reserves the right, however, to hear appeals from any party aggrieved by any regulation, order or requirement issued with respect to State or regional regulations, conduct investigations, and issue any appropriate orders.

(3.0) 2.703 Registration

- (a) By June 30, 1972 all persons owning and/or operating any existing point source shall have registered such source operations with the Board. The information required for registration shall be determined by the Board, and shall be provided in the manner specified by the Board.
- (b) Persons owning and/or operating registered sources to be modified shall comply with Section 2.706.

(6.0) 2.704 Date of Compliance

Except as otherwise specified, compliance with the provisions of these regulations shall be according to the following schedule.

- (a) New Point Sources. All new point sources constructed after the effective date of these regulations shall comply as of going into operation.
- (b) Existing Point Sources. All existing point sources not in compliance as of the effective date of these regulations, shall be in compliance by June 30, 1972. If compliance is not possible by June 30, 1972, the owner or person responsible for the operation of the installation shall have submitted by this date to the Board in a form and manner satisfactory to the Board a control program and schedule to contain a date on or before which full compliance will be attained. In no event can this date be later than June 30, 1975. If approved by the Board, such date will be the date on which the person shall comply. The Board may require persons submitting such a program to submit periodic reports on progress in achieving compliance. Reports shall be submitted in form and manner prescribed by the Executive Secretary or his representative.

(2.0) 2.705 Action on Control Programs

- (a) The Board shall act, and notify the owner of its actions, as early as practicable but within 90 days. Local jurisdictions are

encouraged to provide the Board with their recommendation prior to consideration by the Board.

- (b) The owner shall be furnished copies of any objections by the Board to the control program and may submit answers and comments, in duplicate, to the Board on such objections.
- (c) The Board will consider the owner's answers and comments to any objections, and shall notify the owner in writing its reasons for conditional approval, or denial, of the control program.
- (d) If a control program is denied or conditionally approved, an owner may, by filing a request within 30 days from the date he receives notice of denial or conditional approval, request a rehearing which shall be conducted as a formal hearing pursuant to Section 2.701 (e) of these regulations, from which judicial review pursuant to Virginia Code Sec. 10-17.23:2 shall be available.

(3.0) 2.706 Permit to Construct and/or Modify and Operate

(a) General Requirements

Commencing on the effective date of these regulations, no owner shall cause or permit the commencement of construction of a new source or modification of any source without first obtaining from the Board a permit approving the location and basic pollution control design criteria of the proposed new source or the modification of an existing source and its operation.

(b) Applications

- (1) Application for authority to construct or modify and to operate shall be made in the following manner. If the applicant is a partnership, other than a corporation, a general partner shall sign the application. If the applicant is a corporation, association, or cooperative, an officer shall sign the application. If the applicant is a sole proprietorship, the proprietor shall sign the application.
- (2) A separate application is required for each source subject to these regulations. The applicant may be required to furnish additional information deemed necessary by the Board.
- (3) Each application shall be signed under oath.

(c) Information Required

- (1) Each application for permit to construct or modify and to operate a source shall include such information as may be required by the Board to analyze the effect of the proposed source on the ambient air quality standard of the area and the emission standards which are applicable. The information required would include not less than (but is not limited to) the following:

- (i) siting information
- (ii) general description of plant or modifications
- (iii) complete information regarding proposed air pollution control facilities, and an inventory of type and quantity of contaminants to be emitted.

(d) Standards for Granting Permit

No permit to construct or modify and to operate will be granted unless the applicant shows to the satisfaction of the Board that;

- (1) The source will be designed and will be constructed or modified to operate without causing a violation of the applicable regulations.
- (2) The source will be designed, built and equipped in accordance with established Federal Standards of Performance, or if none are applicable, with standards of performance established by the Board.
- (3) The source, as designed or modified, does not endanger maintenance or attainment of any applicable ambient air quality standard.
- (4) The source, if required by the Board, shall be provided with:
 - (i) sampling ports of a size, number, and location as the Board may specify,
 - (ii) safe access to each port,
 - (iii) instrumentation to monitor and record emission levels,
 - (iv) any other sampling and testing facilities the Board may permit or require.
- (5) If the air pollution control facilities do not achieve the emission limitations stated in Sec. 2.706 (e) temporary operation and corrections will be in accordance with Sec. 2.706 (f) (2).

(e) Action on Permit Applications

The actions of the Board shall include:

- (1) Confirmation with Section 2.705
- (2) Stating in its written approval to the applicant the emission limitations acceptable to it during performance testing in accordance with Section 2.706 (f).

(f) Performance Testing and Compliance

- (1) Within 60 days after placing a new or modified source into operation, the owner shall schedule tests of the emissions in the manner acceptable to the Board. These tests may be witnessed by a representative of the Board.
- (2) In case the performance does not meet the emission limitation specified in Section 2.706 (e) (2) until the performance is corrected to meet the specified limits. Variation from the specified emission limitation may be granted by the Executive Secretary or his representative for a finite period for testing and adjustment.

(g) Exceptions

A permit to construct and operate will not be required for:

- (1) The installation or alteration of an air contaminant detector, air contaminant recorder, combustion controller, or combustion shutoff controls.
- (2) Air conditioning or ventilating systems not designed to remove air contaminant generated by or released from such equipment.
- (3) Low capacity fuel burning equipment, such as: process smoke house generators; devices that use gas as a fuel for space heating with a BTU input of less than 350,000 BTU per hour; or heating devices using gas or oil fuel for space heating with a BTU input of less than 1,000,000 BTU per hour, air conditioning, or heating water; or heating devices used in a private dwelling with a BTU input of less than 1,000,000 BTU per hour.
- (4) Internal combustion engines under 3000 H.P.
- (5) Laboratory equipment used exclusively for chemical or physical analysis.
- (6) Other sources of minor significance specified by the Board.

(h) Suspension or Revocation of Permit

- (1) The Board may, after a formal hearing pursuant to Sec. 2.701 (e) (ii) of the regulations, suspend or revoke a permit for failure to comply with the terms of the permit.
- (2) Suspension or revocation of a permit to operate shall become effective upon actual receipt of the suspension or revocation of the permit by the Board by the holder of the permit.

(13.0) 2.707 Monitoring, Records, Reporting

- (a) The Board may require the owner or operator of any source to: install, use, and maintain monitoring equipment and sample the emission in accordance with methods approved by the Board; and maintain records and make periodic emission reports as required in Sec. 2.707 (b).
- (b) Records and reports, as the Board shall prescribe, pertaining to air contaminants or fuel, shall be recorded, compiled, and submitted on forms furnished by the Board.

(9.0) 2.708 Sampling and Testing Methods

- (a) All tests shall be made and the results calculated in accordance with test procedures approved by the Board. All tests shall be made under the direction of persons qualified by training and/or experience.
- (b) The Board may test emissions of air contaminants from any source. Upon request of the Board the person responsible for the source to be tested shall provide necessary holes in stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices, as may be necessary for proper determination of the emission of air contaminants. This requirement shall be in addition to Section 2.707.

(7.0) 2.709 Reporting of Control Equipment Maintenance or Malfunction

- (a) In case of shutdown and/or bypassing of air pollution control equipment for necessary scheduled maintenance, the intent to shutdown such equipment shall be reported to the Executive Secretary or his representative and local air pollution control agency, if any, at least twenty-four (24) hours prior to the planned shutdown. Such prior notice shall include, but is not limited to, the following:
 - (1) Identification of the specific facility to be taken out of service as well as its location and permit and/or registration number.

- (2) The expected length of time that the air pollution control equipment will be out of service.
 - (3) The nature and quantity of emissions of air contaminants likely to occur during the shutdown period.
 - (4) Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage of the air pollution control equipment.
- (b) In the event that any emission source air pollution control equipment, or related facility, fails in a manner that may cause an increase in the emission of air contaminants in violation of applicable regulations of the Board, the person responsible for such equipment shall immediately notify the Executive Secretary or his representative by telephone of such failure or breakdown and provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. When the condition causing the failure or breakdown has been corrected and the equipment is again in operation, the Executive Secretary or his representative shall be notified.
- (c) Nothing in the Section 2.709 (a) and (b) shall be construed as giving an owner the right to temporarily increase the emission of contaminants or to use as a means of circumventing the emission standards otherwise provided in these regulations.

(2.0) 2.710 Circumvention

No owner shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which would otherwise violate these regulations (this section does not prohibit the construction of a stack or chimney).

(2.0) 2.711 Severability

If any provision of these regulations or the application thereof to any person or circumstances is held to be invalid, such invalidity shall not affect other provisions or application of any other part of these regulations which can be given effect without the invalid provisions of application, and to this end the provisions of these regulations and the various applications thereof are declared to be severable.

AQCR VII
SECTION III

(4.0) 3.700 AIR QUALITY STANDARDS

(2.0) 3.701 General Provisions.

- (a) Air quality standards are required to assure that ambient concentrations of air contaminants are consistent with established criteria and shall serve as the basis for effective and reasonable management of the air resources of the Commonwealth of Virginia.
- (b) At such time as additional pertinent information becomes available with respect to applicable air quality criteria, such information shall be considered and the air quality standards revised accordingly.
- (c) The absence of a specific air quality standard shall not preclude action by the Board to control contaminants to assure protection, safety, welfare, and comfort of the people of the Commonwealth of Virginia.
- (d) The air quality standards established herein shall apply to all areas outside a source property line.
- (e) Where applicable, all measurements of air quality shall be corrected to a reference temperature of 70 degrees F and to a reference pressure of 14.7 pounds per square inch absolute.

(4.1) 3.702 Particulate Matter.

- (a) Air quality standards are
 - (1) 60 micrograms per cubic meter - annual geometric mean.
 - (2) 150 micrograms per cubic meter - maximum 24 hr. concentration not to be exceeded more than once per year.
- (b) Particulate matter shall be determined by the high volume method as described in Appendix B, Part 410, Chapter IV, Title 42, Code of Federal Regulations, or by an equivalent method.

(4.2) 3.703 Sulfur Oxides (Sulfur Dioxide)

- (a) Air quality standards are
 - (1) 80 micrograms per cubic meter (0.30 ppm) - annual arithmetic mean.

- (2) 365 micrograms per cubic meter (0.14 ppm) - maximum 24 hr. concentration not to be exceeded more than once per year.
 - (3) 1,300 micrograms per cubic meter (0.50 ppm) - maximum 3 hr. concentration not to be exceeded more than once per year.
- (b) Sulfur dioxide shall be measured by the pararosaniline method as described in Appendix A, Part 410, Chapter IV, Title 42, Code of Federal Regulations, or by an equivalent method.

(4.5) 3.704 Carbon Monoxide.

- (a) Air quality standards are
- (1) 10 milligrams per cubic meter (9 ppm) - maximum 8 hr. concentration not to be exceeded more than once per year.
 - (2) 40 milligrams per cubic meter (35 ppm) - maximum 1 hr. concentration not to be exceeded more than once per year.
- (b) Carbon monoxide shall be measured by the nondispersive infrared spectrometry method, as described in Appendix C, Part 410, Chapter IV, Title 42, Code of Federal Regulations, or by an equivalent method.

(4.6) 3.705 Photochemical Oxidants.

- (a) Air quality standard is
- (1) 160 micrograms per cubic meter (0.08 ppm) - maximum 1 hr. concentration not to be exceeded more than once per year.
- (b) Photochemical oxidants shall be measured and corrected for interferences due to nitrogen oxides and sulfur dioxide by the method described in Appendix D, Part 410, Chapter IV, Title 42, Code of Federal Regulations, or by an equivalent method.

(4.4) 3.706 Hydrocarbons.

- (a) Air quality standard for hydrocarbons is
- (1) 160 micrograms per cubic meter (0.24 ppm) - maximum 3 hr. concentration (6-9 AM) not to be exceeded more than once per year.
- (b) Hydrocarbons shall be measured and corrected for methane by the method described in Appendix E, Part 410, Chapter IV, Title 42, Code of Federal Regulations, or by an equivalent method.

- (c) The hydrocarbon air quality standard is for use as a guide in determining hydrocarbon emission control required to achieve the photochemical oxidant standard.

(4.3) 3.707 Nitrogen Dioxide.

- (a) Air quality standard is

- (1) 100 micrograms per cubic meter (0.05 ppm) - annual arithmetic mean.

- (b) Nitrogen dioxide shall be measured by the method described in Appendix F, Part 410, Chapter IV, Title 42, Code of Federal Regulations, or by an equivalent method.

(4.1) 3.708 Dustfall.

Geometric mean of monthly values for four consecutive months at any one location shall not exceed 15 tons per square mile per month (metric equivalent: 0.525 milligrams per square centimeter per month or 5.25 grams per square meter per month) including background concentrations.

AQCR VII
SECTION IV
(Rule 701)

(51.13) 4.701.00 OPEN BURNING

(51.13) 4.701.01 Prohibition of Open Burning.

- (a) No person or owner shall kindle or ignite, cause to be kindled or ignited or maintain any open fire in any public or private place outside any building except as provided in paragraph 4.701.02; however, such exceptions shall not allow the burning of rubber tires, asphaltic materials, crankcase oil, impregnated wood, or similar materials which produce dense smoke nor shall such exceptions permit any owner to conduct salvage operations by open burning.
- (b) Open burning under the exceptions of paragraph 4.701.02 does not exempt or excuse a person from the consequences, damages or injuries which may result from such conduct, nor does it excuse or exempt any person from complying with all applicable laws, ordinances, regulations, and orders of the governmental entities having jurisdiction, even though the open burning is conducted in compliance with paragraph 4.701.02.
- (c) All open burning permitted under paragraph 4.701.02, Exceptions, shall be immediately terminated upon the declaration by competent authority of an air pollution episode.

(2.0) 4.701.02 Exceptions.

Exceptions to paragraph 4.701.01 are as follows:

- (a) Open fires may be set in performance of an official duty of any public health or safety officer, after notification of State and Local Air Pollution Control Agencies, if the fire is necessary for one or more of the following reasons or purposes:
 - (1) for the prevention of a fire hazard which cannot be abated by other means;
 - (2) for the instruction of public fire fighters under the supervision of a designated Fire Marshal;
 - (3) for the protection of public health.
- (b) Fires may be used for cooking of food, provided no smoke violation or other nuisance is created.

- (c) Open fires may be set for recreational purposes, such as camp fires, provided no smoke violation or nuisance is created.
- (d) Salamanders or other devices may be used for heating by construction or other workers, provided no smoke violation or other nuisance is created.
- (e) In those areas where provision for public or private collection of leaves is not made, the open burning of leaves is permitted.
- (f) In those areas where regular refuse collection is not available, open burning of ordinary household trash by householders is permitted, provided that:
 - (1) garbage, dead animals and animal waste are not burned;
 - (2) materials are not burned which create dense smoke (emissions of an opacity or darkness greater than No. 2 on the Ringelmann Smoke Chart) or objectionable odors or any other emissions which may be injurious or noxious to people or property;
 - (3) no nuisance is created.
- (g) Open fires may be set for operation of craft exhibits, pageants of historical significance and for ceremonial occasions.
- (h) Fires may be set in the course of forest management and agricultural operations in growing crops or raising fowl or animals provided no nuisance is created.

(2.0) 4.701.03 Exclusions.

This rule does not apply to open burning using devices or methods specifically designed to provide good combustion performance under the following conditions:

- (a) Visible emissions shall comply with Section 4.702.00 (Rule 702).
- (b) All devices or methods under this Section 4.701.03 shall be approved by the Executive Secretary or his representative and local air pollution control agency, if any, prior to installation.

AQCR VII
SECTION IV
(Rule 702)

(50.1.2) 4.702.00 SMOKE AND OTHER VISIBLE EMISSIONS - STATIONARY SOURCES

(50.1) 4.702.01 Particulates of Smoke or Other Visible Emissions.

- (a) No owner shall cause, suffer, allow or permit the discharge into the outdoor atmosphere from any single point of emissions from a source any air pollutant which is
 - (1) darker in shade than smoke designated as No. 1 on the Ringelmann Smoke Chart,
 - (2) of such opacity as to obscure an observer's view to a degree greater than does smoke designated as No. 1 on the Ringelmann Smoke Chart (when used as a measure of opacity).

(2.0) 4.702.02 Exceptions

- (a) If it can be demonstrated that emissions discharging from the single point of emission show that the emission is in compliance with applicable regulations on particulate emissions for the specific source in question, the Board may modify the requirements of this regulation.
- (b) When starting a new fire or blowing tubes or cleaning a fire box a person may discharge into the atmosphere from any single point of emission, emissions of a shade or density not darker than No. 3 on the Ringelmann Smoke Chart or 60 percent opacity for brief periods.
- (c) The limits of Section 4.702.01 shall not apply when the opacity of the visible emission is due to the presence of uncombined water.

(2.0) 4.702.03 Traffic Hazard.

No person shall discharge from any source whatsoever such quantities of air contaminants, uncombined water, or other materials which may cause a traffic hazard.

AQCR VII
SECTION IV
(Rule 703)

(51.5) 4.703.00 PARTICULATE EMISSION FROM EXISTING FUEL BURNING EQUIPMENT

(51.5) 4.703.01 Emission Standards for Furnaces

- (a) No owner shall allow to be emitted into the outdoor atmosphere from any fuel burning equipment or to pass a convenient measuring point near the stack outlet, particulate matter in the flue gases to exceed the appropriate following standard:
- (1) For operations with total heat input less than eighty-seven million (87×10^6) BTU per hour, the maximum allowable emission shall be 0.3 pounds of particulate per million BTU input.
 - (2) For operations with total heat input between eighty-seven million (87×10^6) and ten billion ($10,000 \times 10^6$) BTU per hour, the maximum allowable emission in pounds per million BTU input, E , shall be determined by the following equation:
 $E = 0.8425 H^{-0.2314}$, where H is the total heat input in millions of BTU per hour.
 - (3) For operations with total heat input in excess of ten billion ($10,000 \times 10^6$) BTU per hour, the maximum allowable emission shall be 0.10 pounds of particulate per million BTU input.
 - (4) Figure 4.703.1 illustrates the above emission standards.
- (b) For purposes of this regulation, the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or stacks. The heat input value used shall be the equipment manufacturer's or designer's guarantee maximum input, or maximum continuous heat input, or maximum continuous heat input determined by test, whichever is greater. The total heat input of all fuel burning units at a plant or on a premise normally operated simultaneously shall be used for determining the maximum allowable amount of particulate matter which may be emitted.

(9.0) 4.703.02 Emission Testing.

Emission tests relating to this rule apply to recognized ASME methods. The approved methods are the ASME Test Code for Dust Separating Apparatus (PTC-21-1941) and the ASME Test Code for Determining Concentrations in Gas Streams (PTC-27-1957). Procedures may be adjusted or changed by the

Executive Director to suit specific sampling conditions or needs based upon good practice, judgement and experience. When such tests are adjusted, consideration shall be given to the effect of such change on established emission standards.

(2.0) 4.703.03 Exemptions.

All fuel burning equipment using solid fuel for space and domestic water heating with a BTU input of less than 350,000 BTU per hour shall be exempt from this rule.

All fuel burning equipment for space heating with a BTU input of less than 1,000,000 BTU per hour shall be exempt from this rule.

(2.0) 4.703.04 Bacharach Standard.

No owner shall cause or allow to be emitted into the outdoor atmosphere from any fuel burning equipment or to pass a convenient measuring point near the breeching, smoke which exceeds Number 4 on the Bacharach Scale, or the equivalent.

AQCR VII
SECTION IV
(Rule 704)

(50.1) 4.704.00 PARTICULATE MATTER

(50.1) 4.704.01 Restriction of Emission of Particulate Matter.

- (a) The maximum allowable emission of particulate matter from any source whatever except fuel burning equipment and incinerators shall be determined from Figure 4.704.1. Where the process weight (moisture free basis) per hour falls between two values in the figure, the maximum weight discharged per hour shall be determined by linear interpolation. Where the process weight is in the figure, the maximum weight discharged per hour shall be determined by linear interpolation. Where the process weight is in excess of 60,000 pounds per hour, there shall not be discharged in any one hour from any source whatsoever particulate matter in excess of 40 pounds per hour.

(50.1.3) 4.704.02 Control of Fugitive Particulate Matter.

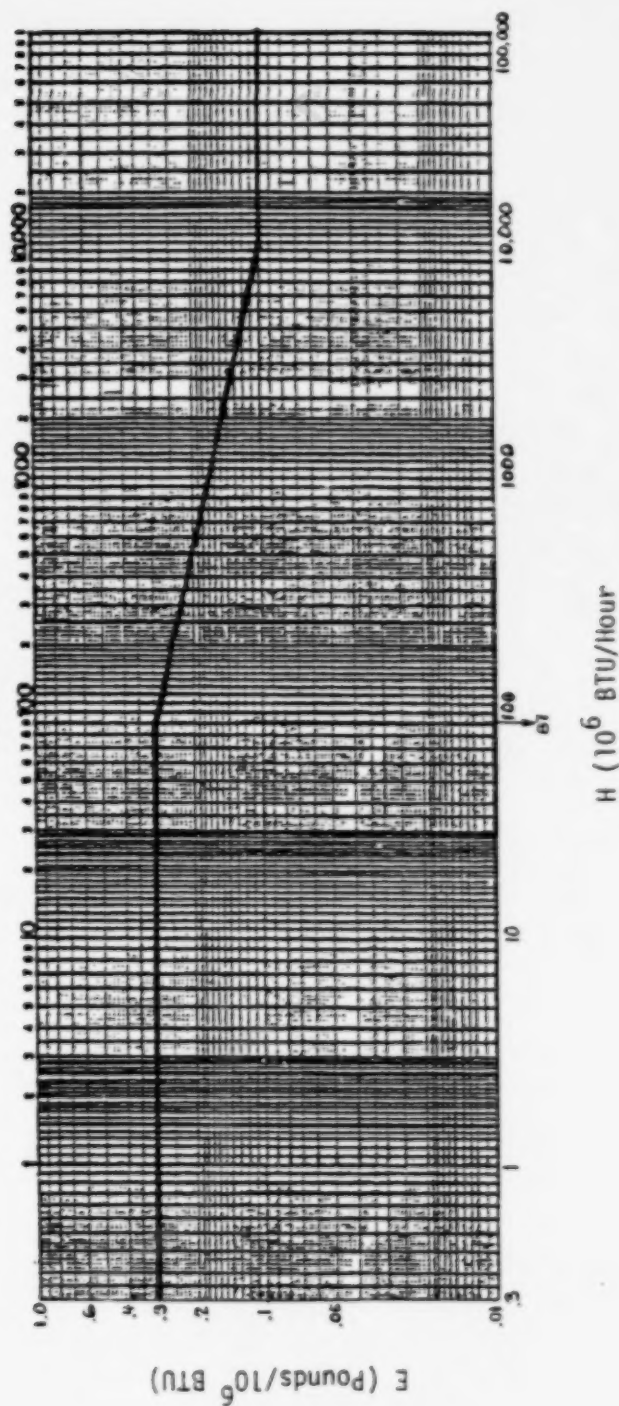
No person shall cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but not limited to, the following:

- (a) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
- (b) Application of asphalt, oil, water or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can create airborne dusts.
- (c) Installation and use of hoods, fans and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations.
- (d) Open equipment for conveying or transporting materials likely to become airborne shall be covered, or treated in an equally effective manner at all times when in motion.
- (e) The paving of roadways and their maintenance in a clean condition.

- (f) The prompt removal of earth or other material from paved streets which earth or other material has been transported thereto by trucking or earth moving equipment or erosion by water.

ALLOWABLE PARTICULATE EMISSIONS FROM FUEL BURNING EQUIPMENT

Figure 4.703.01



H = total heat input in millions of BTU per hour

E = maximum emissions in pounds of particulate matter per million BTU heat input

$$E = 0.8425 H^{-0.2314} \quad (H = 87 \text{ to } 10,000)$$

FIGURE 4.704.1

Process Wt/hr (lbs)	Maximum Weight Disch/hr (lbs)	Process Wt/hr (lbs)	Maximum Weight Disch/hr (lbs)	Process Wt/hr (lbs)	Maximum Weight Disch/hr (lbs)
50 or less	0.24	1900	4.03	4700	6.45
100	0.46	2000	4.14	4800	6.52
150	0.66	2100	4.24	4900	6.60
200	0.85	2200	4.34	5000	6.67
250	1.03	2300	4.44	5500	7.03
300	1.20	2400	4.55	6000	7.37
350	1.35	2500	4.64	6500	7.71
400	1.50	2600	4.74	7000	8.05
450	1.63	2700	4.84	7500	8.39
500	1.77	2800	4.92	8000	8.71
550	1.89	2900	5.02	8500	9.03
600	2.01	3000	5.10	9000	9.36
650	2.12	3100	5.18	9500	9.67
700	2.24	3200	5.27	10000	10.00
750	2.34	3300	5.36	11000	10.63
800	2.43	3400	5.44	12000	11.28
850	2.53	3500	5.52	13000	11.89
900	2.62	3600	5.61	14000	12.50
950	2.72	3700	5.69	15000	13.13
1000	2.80	3800	5.77	16000	13.74
1100	2.97	3900	5.85	17000	14.36
1200	3.12	4000	5.93	18000	14.97
1300	3.26	4100	6.01	19000	15.58
1400	3.40	4200	6.08	20000	16.19
1500	3.54	4300	6.15	30000	22.22
1600	3.66	4400	6.22	40000	28.30
1700	3.79	4500	6.30	50000	34.30
1800	3.91	4600	6.37	60000 or more	40.00

AQCR VII
SECTION IV
(Rule 705)

(50.0) 4.705.00 GASEOUS CONTAMINANTS

(50.0) 4.705.01 Prohibition of Gaseous Contaminant Emissions

- (a) No owner shall allow the operation of combustion installation and process equipment so as to disperse into the outdoor atmosphere gaseous contaminant emissions in such quantities or concentrations as to injure human, plant or animal life, or cause a condition of air pollution.

(50.2) 4.705.02 Sulfur Containing Gases and Compounds

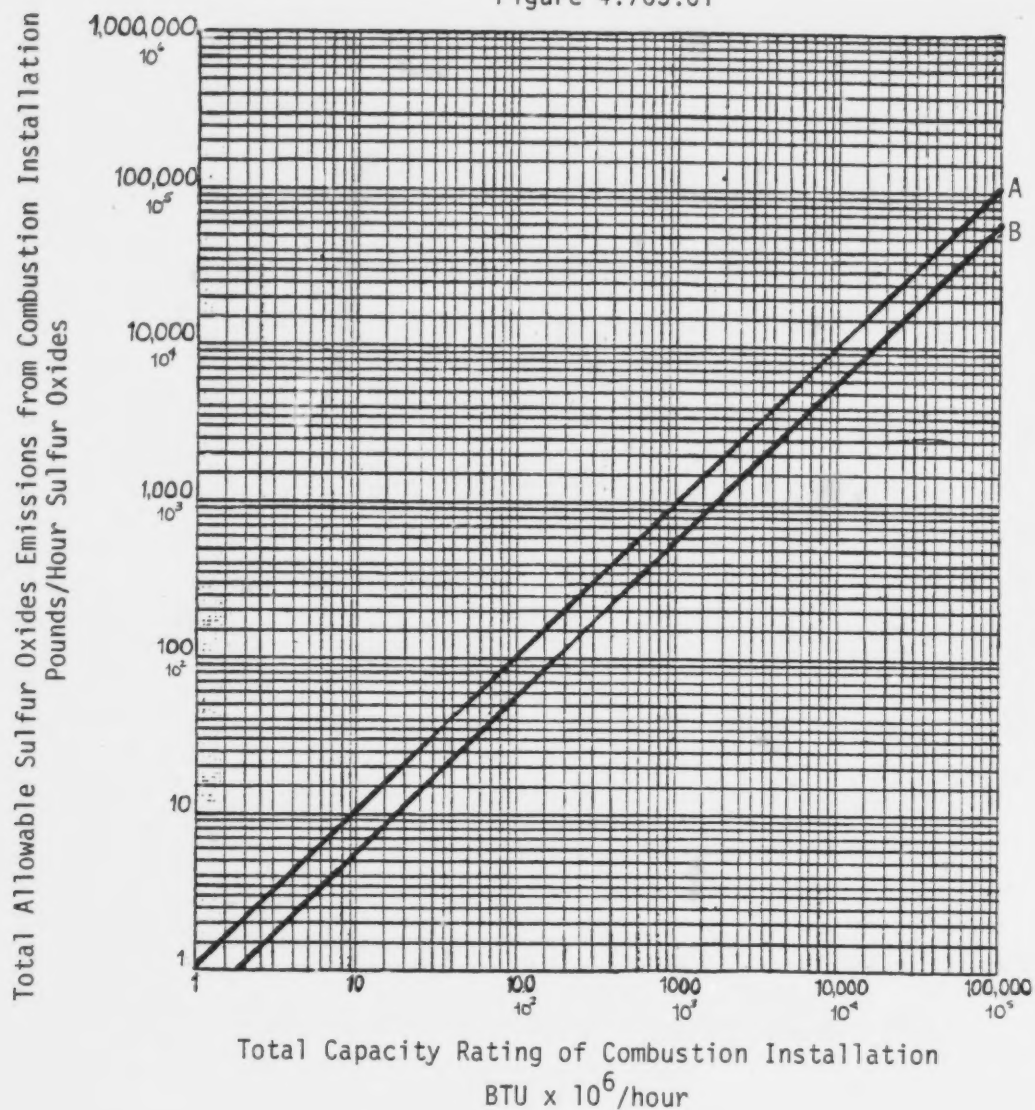
- (a) Control of the Emission of Sulfur Dioxide from Fuel Burning Installations.
- (1) No person shall cause, suffer, allow, or permit sulfur dioxide caused by the combustion of fuel to be discharged from all combustion equipment at a given location in excess of the quantity shown by Curve A, Figure 4.705.1.
- (2) If necessary to achieve and maintain the ambient air quality standards, the Board will require on or before 1975 emission standards in accordance with Curve B, Figure 4.705.1 or more restrictive emission standards as may be required.
- (b) Ocean Going Vessels.
- (1) (Reserve for future regulations)

(51.16) 4.705.03 Control of Hydrocarbon Emissions From Stationary Sources

- (a) General.
- (1) The purpose of the following is to reduce hydrocarbon emissions which when combined photochemically with nitrogen oxides will cause oxidant levels to exceed established standards.
- (b) Storage of Volatile Organic Materials.
- (1) No person shall place, store, or hold in any stationary tank, reservoir, or other container of more than 65,000 gallons capacity any volatile organic compounds unless such tank, reservoir, or other container is a pressure tank capable of maintaining working pressures sufficient at all times to

ALLOWABLE SULFUR OXIDES EMISSIONS FROM COMBUSTION INSTALLATION

Figure 4.705.01



4.705.01

Curves based on the following equations:

- (A) $S = 1.06 K$
- (B) $S = 0.55 K$

Where:

S = Allowable emissions of sulfur oxides in pounds/hour

K = Total capacity rating of combustion installation in
BTU x 10⁶/hour

prevent vapor or gas loss to the atmosphere or is designed, and equipped with one of the following vapor loss control devices:

- (i) A floating roof, consisting of a pontoon type, double deck type roof or internal floating cover, which will rest on the surface of the liquid contents and be equipped with a closure seal or seals to close the space between the roof edge and tank wall. This control equipment shall not be permitted if the volatile organic compounds have a vapor pressure of 17.0 pounds per square inch absolute or greater at 100 degrees F or 15 pounds Reid vapor pressure, whichever is limiting. All tank gauging or sampling devices shall be gas-tight except when tank gauging or sampling is taking place.
- (ii) A vapor recovery system, consisting of a vapor gathering system capable of collecting the volatile organic compound vapors and gases discharged and a vapor disposal system capable of processing such volatile organic vapors and gases so as to prevent their emission to the atmosphere and with all tank gauging and sampling devices gas-tight except when gauging or sampling is taking place.
- (iii) Other equipment or means of equal efficiency for purposes of air pollution control as may be approved by the Board.
- (iv) No person shall place, store, or hold in any stationary storage vessel more than 250 gallons capacity any volatile organic compound unless such vessel is equipped to be filled through a submerged fill pipe or is a pressure tank as described in paragraph 4.705.03 (b)(1) or is fitted with a vapor recovery system as described in Section 4.705.03 (b)(1)(ii).

(c) Volatile Organic Materials Loading Facilities.

- (1) No person shall load any volatile organic compounds into any tank truck or trailer from any loading facility handling more than 50,000 gallons per day unless such loading facility is equipped with a vapor collection and disposal system, or use of a filling procedure of equal or better emission control efficiency, or their equivalent, properly installed, in good working order, and in operation.

- (2) No person shall load any volatile organic compounds into any tank truck or trailer from any loading facility handling more than 50,000 gallons/day of such compounds unless such loading facility is equipped as set forth in 4.705.03 (c)(1). If a vapor collection and disposal system is utilized, the loading arm shall be equipped with a vapor collection adaptor, pneumatic, hydraulic, or other mechanical means which will provide a vapor-tight seal between the adaptor and the hatch. A means shall be provided to prevent liquid organic compounds drainage from the loading device when it is removed from the hatch of any tank truck or trailer. When loading is effected through means other than the hatches, all loading lines shall be equipped with fittings which make vapor-tight connections and which close automatically when disconnected.

(d) Volatile Organic Compound Water Separation

- (1) No person shall use any compartment of any single or multiple compartment equipment designed to separate water from only volatile organic compounds which compartment received effluent water containing 200 gallons a day or more of volatile organic compound from any equipment processing, refining, treating, storing, or handling volatile organic compounds unless such compartment is equipped with one of the following vapor loss control devices, properly installed, in good working order, and in operation:
- (i) A container having all openings sealed and totally enclosing the liquid contents. All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
 - (ii) A container equipped with a floating roof consisting of a pontoon type, double deck type roof, or internal floating cover, which will rest on the surface of the contents and be equipped with a closure seal or seals to close the space between the roof edge and container wall. All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
 - (iii) A container equipped with a vapor recovery system consisting of a vapor gathering system capable of collecting the hydrocarbon vapors and gases discharged and a vapor disposal system capable of processing such hydrocarbon vapors and gases so as to prevent their emission to the atmosphere and with all container gauging and sampling devices gas-tight except when gauging or sampling is taking place.

- (iv) A container having other equipment of equal efficiency for purposes of air pollution control as may be approved by the Board.

(e) Pumps and Compressors.

- (1) All pumps and compressors handling volatile organic compounds shall have mechanical seals or other equipment of equal efficiency for purposes of air pollution control as may be approved by the Board.

(f) Waste Gas Disposal.

- (1) No person shall emit a waste gas stream from any plant producing ethylene for chemical feed stock or utilizing ethylene as a raw material into the atmosphere in excess of 40 pounds per day unless the waste gas stream is properly burned at 1300 degrees for 0.3 seconds or greater in a direct-flame afterburner or removed by other methods of comparable efficiency.
- (2) No person shall emit continuously hydrocarbon gases to the atmosphere from a vapor blowdown system unless these gases are burned by smokeless flares, or an equally effective control device as approved by the Board. This rule is not intended to apply to accidental, emergency, or other infrequent emissions of hydrocarbons, needed for safe operation of equipment and processes.

(g) Organic Solvents.

- (1) A person shall not discharge more than 15 pounds of organic materials into the atmosphere in any one day from any article, machine, equipment or other contrivance in which any organic solvent or any material containing organic solvent comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen unless such a discharge represents an overall reduction of 85% or greater.
- (2) A person shall not discharge more than 40 pounds of organic material into the atmosphere in any one day from any article, machine, equipment, or other contrivance used under conditions other than described in paragraph 4.705.03 (g)(1), for employing, applying, evaporating or drying any photochemically reactive solvent, as defined in paragraph 4.705.03 (g)(11), or material containing such solvent, unless all organic materials discharged from such article, machine, equipment or other contrivance have been reduced by at least 85% overall. The limitations prescribed in this paragraph shall not apply to any complying industrial sur-

face coating, which means any paint, lacquer, varnish, ink, adhesive or other surface coating material which emits to the atmosphere organic compounds which are not photochemically reactive as defined in Section 4.705.03 (g) (11). In determining percentages for water-based paints, the quantity of water shall be in the calculation of percentage.

- (3) Any series of articles, machines, equipment or other contrivances designed for processing a continuously moving sheet, web, strip, or wire which is subjected to any combination of operations described in paragraph 4.705.03 (g)(1) or 4.705.03 (g)(2) involving any photochemically reactive solvent, as defined in paragraph 4.705.03 (g)(11) or material containing such solvent, shall be subject to compliance with paragraph 4.705.03 (g)(2).
- (4) Emissions of organic materials to the atmosphere from the clean-up with photochemically reactive solvents, as defined in paragraph 4.705.03 (g)(11) article, machine, equipment or other contrivance described in paragraph 4.705.03 (g)(1), 4.705.03 (g)(2), or 4.705.05 (g)(3), shall be included with the other emissions of organic materials from that article, machine, equipment, or other contrivances for determining compliance with these rules.
- (5) Emissions of organic materials to the atmosphere as a result of spontaneously continuing drying of products for the first 12 hours after their removal from any article, machine, equipment, or other contrivance described in paragraphs 4.705.03 (g)(1), 4.705.03 (g)(2), or 4.705.03 (g)(3), shall be included with other emissions of organic materials from that article, machine, equipment, or other contrivance, for determining compliance with this rule.
- (6) Emissions of organic materials into the atmosphere required to be controlled by paragraph 4.705.03 (g)(1), 4.705.03 (g)(2), 4.705.03 (g)(3) shall be reduced by:
 - (a) Incineration, provided that 90 percent or more of the carbon in the organic material being incinerated is oxidized to carbon dioxide, or
 - (b) Absorption, or
 - (c) Processing in a manner determined by the Board to be not less effective than (a) or (b) above.
- (7) A person incinerating, absorbing, or otherwise processing organic materials pursuant to this rule shall provide, properly install, and maintain in calibration, in good working

order and in operation, devices as specified in the authority to construct or the permit to operate, or as specified by the Board, for indicating temperatures, pressures, rates of flow, or other operating conditions necessary to determine the degree and effectiveness of air pollution control.

- (8) Any person using organic solvents or any materials containing organic solvents shall supply the Board, upon request and in the manner and form prescribed by him, written evidence of the chemical compositions, physical properties, and amount consumed for each organic solvent used.
- (9) The provisions of this rule shall not apply to:
 - (a) The manufacture of organic solvents, or the transport or storage of organic solvents or materials containing organic solvents.
 - (b) The use of equipment for which other requirements are specified by 4.705.03 (a), 4.705.03 (b), or 4.705.03 (c) or which are exempt from air pollution control requirements by said rules.
 - (c) The spraying or other equipment of insecticides, pesticides, or herbicides.
 - (d) The employment, application, evaporation, or drying of saturated halogenated hydrocarbons, or organic compounds in which all olefinic groups contain 3 or more halogen atoms.
 - (e) Development or research laboratory operation involving the use of photochemically reactive solvents.
 - (f) The use of any material, in any article, machine, equipment or other contrivance described in 4.705.03 (g)(1), 4.705.03 (g)(2), 4.705.03 (g)(3), or 4.705.03 (g)(4) if:
 - (i) the volatile content of such material consists only of water and organic solvents, and
 - (ii) the organic solvents comprise not more than 20 percent of said volatile content, and
 - (iii) the volatile content is not photochemically reactive as defined in 4.705.03 (g)(11).

- (10) For the purpose of this rule, organic solvents include diluents and thinners and are defined as organic materials which are liquids at standard conditions and which are used as dissolvers, viscosity reducers, or cleaning agents.
 - (11) For the purpose of this rule a photochemically reactive solvent is any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified below or which exceeds any of the following individual percentage composition limitations, referred to the total volume of solvent;
 - (a) A combination of hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones having an olefinic or cycloolefinic type of unsaturation: 5 percent,
 - (b) A combination of aromatic hydrocarbons: 20 percent.
 - (12) For the purpose of this rule, organic materials are defined as chemical compounds of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, metallic carbonates, and ammonium carbonate.
- (h) Architectural Coatings.
- (1) A person shall not sell or offer for sale in containers exceeding one gallon capacity, any architectural coating containing photochemically reactive solvent, as defined in 4.705.03 (g)(11).
 - (2) A person shall not employ, apply, evaporate, or dry any architectural coating, purchased in container exceeding one gallon capacity, containing photochemically reactive solvent, as defined in 4.705.03 (g)(11).
 - (3) A person shall not thin or dilute any architectural coating with a photochemically reactive solvent, as defined in 4.705.03 (g)(11).
 - (4) For the purpose of this rule, an architectural coating is defined as a coating used for residential or commercial buildings and their appurtenances; or industrial buildings.
- (i) Disposal and Evaporation of Solvents.
- (1) A person shall not, during any one day, dispose of a total of more than 1½ gallons of any such photochemically reactive solvent by any means which will permit the evaporation of such solvent into the atmosphere.

(51.16) 4.705.04 Control of Carbon Monoxide Emissions

(a) General Provisions

The application of this section shall apply only to those areas of locations where carbon monoxide levels are designated by the Board to have adverse health or other effects.

- (b) No person shall emit carbon monoxide waste gas stream from any catalyst regeneration or a petroleum cracking system, petroleum coker, or other petroleum process or from the operation of a grey iron cupola, blast furnace, or basic oxygen steel furnace into the atmosphere unless (1) the waste gas stream is burned at 1300 degrees F. for 0.3 seconds or greater in a direct-flame afterburner or boiler equipped with a combustion control indicator or (2) other devices or procedures are employed that reduce carbon monoxide emissions to levels comparable with a boiler or afterburner installation.

(51.10) 4.705.05 Control of Nitrogen Oxides Emissions
(51.7)

(a) Nitric Acid Manufacture

No person shall cause, suffer, allow or permit the emission of nitrogen oxides (expressed as nitrogen dioxide) from nitric acid manufacturing plants into the outdoor atmosphere in excess of 5.5 pounds per ton of 100% acid produced.

(b) Existing Fuel-Burning Equipment

(1) General Provisions

This section shall be applied only in those areas or locations where the ambient levels of nitrogen oxides (expressed as nitrogen dioxide) have been determined by the Board to be excessive.

- (2) No person shall cause, suffer, allow or permit nitrogen oxides (expressed as nitrogen dioxide) to be discharged into the outdoor atmosphere from each existing fuel burning unit larger than 250 million BTU per hour heat input in excess of:

- (a) Graph 4.705.02 curve A when gaseous fossil fuel is used
- (b) Graph 4.705.03 curve A when liquid fossil fuel is used
- (c) Graph 4.705.04 when solid fossil fuel is used

- (d) In those regions, districts, or locations where attainment of the ambient air quality standards is required, the Board will require emission performance in accordance with Graphs 4.705.02 and 4.705.03 Curve B or Curve C.
- (e) Where gaseous and liquid fossil fuels are burned simultaneously in any combination in fuel burning equipment of more than 250 million BTU per hour heat input, the applicable emission limitation shall be determined by proration. Compliance shall be determined using the following formula:

$$Z = \frac{x(G) + y(O)}{x + y}$$

where:

x is the percent of total heat input derived from gaseous fossil fuels.

y is the percent of total heat input derived from liquid fossil fuels.

G is the applicable emission limitation for gaseous fossil fuels.

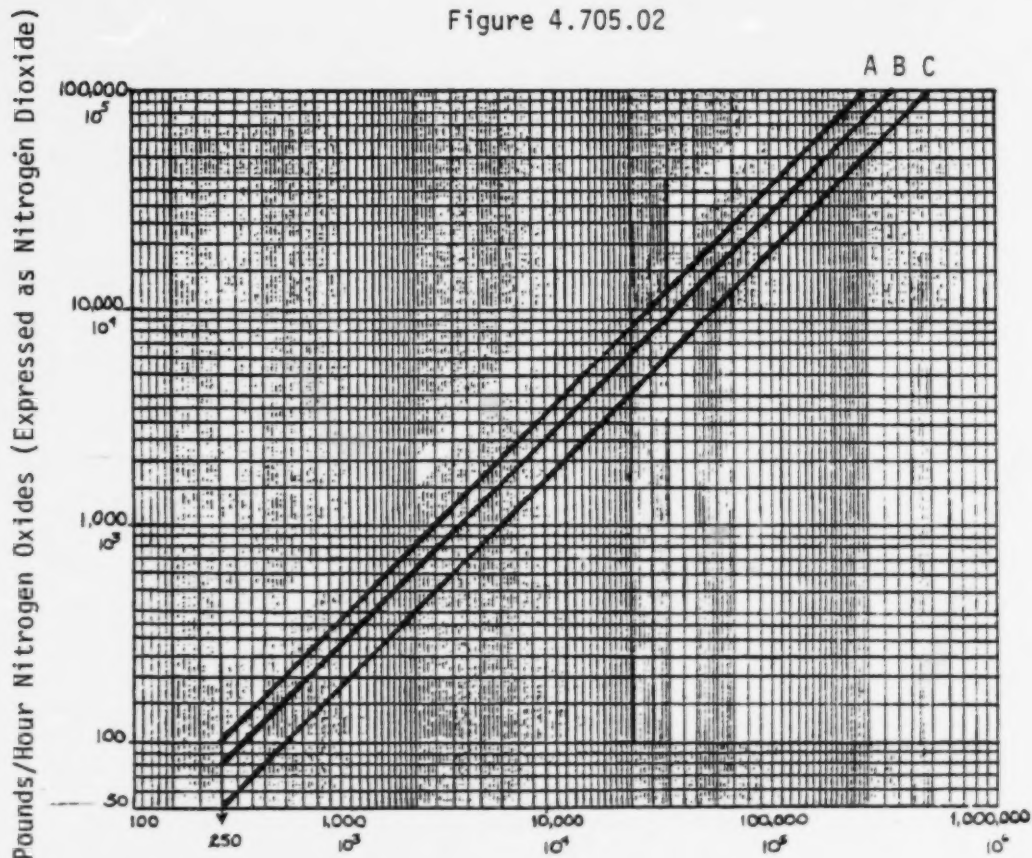
O is the applicable emission limitation for liquid fossil fuels.

Z is the allowable emission in pounds per million BTU.

- (3) Where solid fossil fuels are burned simultaneously with gaseous and/or liquid fossil fuels in fuel burning equipment, the emission limits will not apply.
- (4) The stack sampling test method applicable to a source subject to this regulation shall be Method 7 as described in the Appendix of the Federal Register, Volume 36, No. 247, December 23, 1971.

GAS FIRED FUEL BURNING EQUIPMENT

Figure 4.705.02



Capacity Rating of Each Combustion Installation
Exceeding 250×10^6 BTU per Hour Input

Curves based on the following equations:

- (A) $N = 0.4 \times K$
- (B) $N = 0.3 \times K$
- (C) $N = 0.2 \times K$

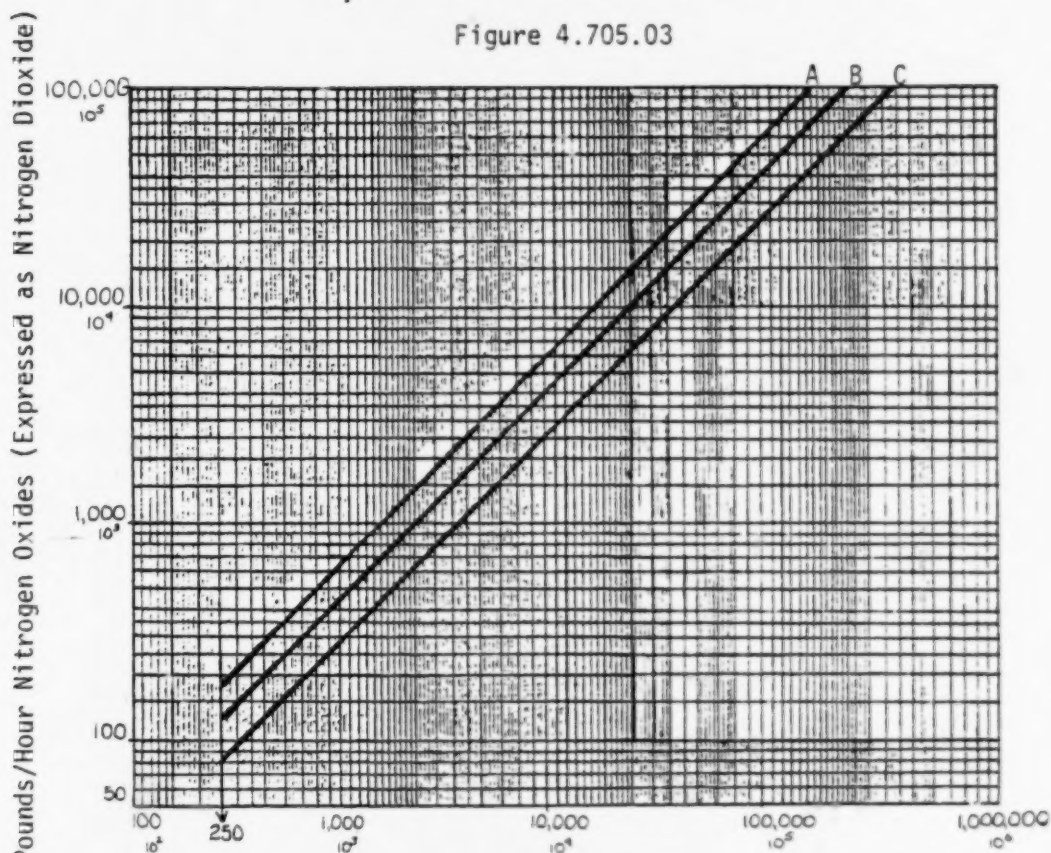
Where:

K is capacity rating of each combustion installation exceeding 250×10^6 BTU per hour in BTU $\times 10^6$ /hour

N is allowable nitrogen oxides emissions from each combustion installation in pounds/hour nitrogen oxides (expressed as nitrogen dioxide)

OIL FIRED FUEL BURNING EQUIPMENT

Figure 4.705.03



Capacity Rating of Each Combustion Installation
Exceeding 250 x 10⁶ BTU per Hour Input

Curves based on the following equations:

- (A) $N = 0.7 \times K$
- (B) $N = 0.5 \times K$
- (C) $N = 0.3 \times K$

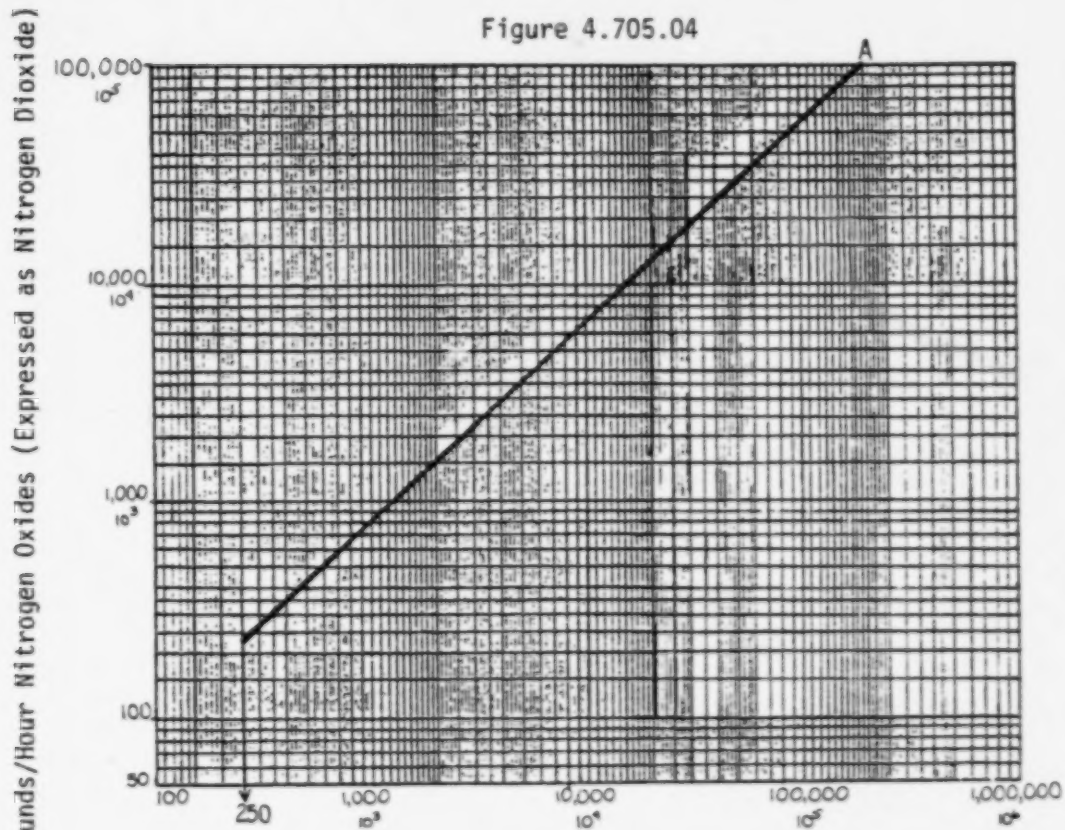
Where:

K is capacity rating of each combustion installation exceeding 250 x 10⁶ BTU per hour in BTU x 10⁶/hour

N is allowable nitrogen oxides emissions from each combustion installation in pounds/hour nitrogen oxides (expressed as nitrogen dioxide)

SOLID FOSSIL FUEL BURNING EQUIPMENT

Figure 4.705.04



Capacity Rating of Each Combustion Installation
Exceeding 250×10^6 BTU per Hour Input

Curve based on the following equation:

$$(A) \quad N = 0.9 \times K$$

Where:

K is capacity rating of each combustion installation exceeding 250×10^6 BTU per hour in BTU $\times 10^6$ /hour

N is allowable nitrogen oxides emissions from each combustion installation in pounds/hour nitrogen oxides (expressed as nitrogen dioxide)

AQCR VII
SECTION IV
(Rule 706)

(50.6) 4.706.00 ODOR

(2.0) 4.706.01 Scope.

This regulation shall apply to all operations that produce odorous emissions.

(50.6) 4.706.02 Prohibition of Objectionable Odor.

No person shall cause, suffer, allow or permit any source to discharge air contaminants which cause an objectionable odor without employing adequate measures for the control of odorous emissions, as may be approved by the Board.

(2.0) 4.706.03 Determination of Violation

The determination of objectionable odor is to be made after a thorough review of all data or evidence relating to the situation which may be obtained by an investigation directed by the Executive Secretary, and by holding a public hearing to hear complaints as prescribed in these regulations. The investigation may include use of an odor panel survey and/or other methods approved by the Board.

(2.0) 4.706.04 Exception.

This Rule is not intended to be applied to accidental or other infrequent emissions of odors.

AQCR VII
SECTION IV
(Rule 707)

(51.9) 4.707.00 INCINERATORS

(51.9) 4.707.01 Prohibition of Smoke, Particulates and Odor Emissions from Incinerators.

No owner shall cause, suffer, allow or permit the operation of an incinerator so as to discharge into the outdoor atmosphere smoke, particulate, or odor sufficient to cause a condition of air pollution.

(2.0) 4.707.02 Determination of Violation

(a) Smoke and Incinerators.

Smoke emitted into the atmosphere from any incinerator shall not be darker in shade than No. 1 on the Ringelmann Chart; or of such opacity as to obscure an observer's view to a degree greater than does smoke designated as No. 1 on the Ringelmann Chart (when used as a measure of opacity).

(b) Odor From Incinerators.

Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emissions of objectionable odors.

(51.9) 4.707.03 Emission Standards for Existing Incinerators

Incinerators shall not discharge particulate matter in excess of .14 grains per standard cubic foot of dry flue gas corrected to 12% carbon dioxide (without the contribution of auxiliary fuel). This limitation shall apply when the incinerator is operating at design capacity.

(51.9) 4.707.04 Flue-Fed Incinerators

Flue-fed incinerators (those which use the same flue for feeding the refuse and discharging the gases of combustion) are prohibited for incineration usage.

(9.0) 4.707.05 Emission Testing

Emission tests relating to this rule apply to recognized ASME methods. The approved methods are the ASME Test Code for Dust-Separating Apparatus (PTC-21-1941) and the ASME Test Code for Determining Dust Concentrations in Gas Streams. Procedures may be adjusted or changed by the Executive Director to suit specific sampling conditions or needs based upon good

practice, judgment and experience. When such tests are adjusted, consideration shall be given to the effect of such change on established emission standards.

Note: A variance has been granted to allow the operation of the Alexandria City Incinerator in excess of the federally approved particulate emission limitations for incinerators until December 31, 1979.

SECTION IV
(Rule 710)

(12.0) 4.710.00 MOBILE SOURCE EMISSIONS

(12.0) 4.710.01 Prohibition of Acts Affecting Emissions from Motor Vehicles

- (a) No person shall cause, suffer, allow, or permit the removal, disconnection or disabling of a crankcase emission control system or device, exhaust emission control system or device, fuel evaporative emission control system or device, or other air pollution control system or device which has been installed on a motor vehicle in accordance with federal laws and regulations while such motor vehicle is operating in the Commonwealth of Virginia.
- (b) Nor shall any person defeat the design purpose of any such motor vehicle pollution control system or device by installing therein or thereto any part or component which is not a standard factory replacement part or component of the device.
- (c) Nor shall the motor vehicle or its engine be operated with the motor vehicle pollution control system or device removed or otherwise rendered inoperable.
- (d) The provisions of the foregoing paragraphs under 4.10.01 shall not prohibit or prevent shop adjustments and/or replacements of equipment for maintenance or repair or the conversion of engines to low polluting fuels, such as, but not limited to, natural gas or propane.

(12.0) 4.710.02 Visible Emission for Mobile Source

- (a) No person shall cause or permit the emission of visible air contaminants from gasoline-powered mobile sources for longer than 5 consecutive seconds after the engine has been brought up to operation temperature.
- (b) No person shall cause or permit the emission of visible air contaminants from diesel-powered mobile sources of a density equal to or greater than 20 percent opacity for longer than 5 consecutive seconds after the engine has been brought up to operating temperature.
- (c) The propulsion engine of a commercial vehicle parked in a business or residential area shall not be left running more than three (3) minutes after the vehicle is parked, except when the propulsion engine provides auxiliary service other than for heating or air conditioning.

(2.0) 4.710.03 Determination of violations

(a) (Reserve for future system of inspections).

AQCR VII
SECTION VI

(8.0) 6.700 AIR POLLUTION EMERGENCY EPISODE

(2.0) 6.701 General Requirements

- (a) An Air Pollution Emergency Episode Plan provides standards and procedures to be followed whenever pollution of the air has the potential of reaching an emergency condition if allowed to go unchecked.
- (b) Whenever the Executive Secretary or Regional-Director determines the accumulation of air pollution may attain, is attaining or has attained a level or levels considered injurious to human health, conditions of air pollution designated as Forecast, Alert, Warning and Emergency shall be declared. In making a determination, the criteria defined in Section 6.702.00 shall be used as guidance.
- (c) To assure compliance with this regulation, sources designated by the Executive Secretary shall submit standby emission reduction plans in accordance with Section 6.703.00. In accordance with such standby emission reduction plans, standby orders as specified in Section 6.704.00 shall be implemented as a designated level is reached.
- (d) Nothing contained in this regulation shall be construed as allowing, permitting or maintaining an emission from any installation in the State to be subjected to a lesser degree of control than may be required for existing or new regulations adopted by the Board or other appropriate authority.

6.702

- (a) A condition justifying the proclamation of a Forecast, Alert, Warning or Emergency shall be deemed to exist whenever the Executive Secretary or Regional Director determines that the accumulation of one or more air pollutants in any place, locality, county or other area in the State may attain, is attaining or has attained levels which could, if such levels are sustained or exceeded, lead to a threat to the health of the public. In making this determination the specified conditions in Section 6.702.00(b)(c) and (d) shall be used as guidance.
- (b) Episode Criteria

(1) Forecast Stage

An internal administrative watch shall be declared by the Executive Secretary or Regional Director whenever the national, local or staff meteorologist issues a forecast indication an atmospheric stagnation will cover any substantial portion of the Commonwealth of Virginia for an extended period. Such a weather forecast will indicate meteorological conditions which are expected to inhibit pollutant dispersion. The watch shall be in effect for those areas of the State covered by the weather forecast and it shall continue throughout the atmospheric stagnation period. Such weather forecasts indicating atmospheric stagnation will take the form of:

- (i) A regional Air Stagnation Advisory including any substantial part of the Commonwealth of Virginia issued by the local meteorologist at the Environmental Meteorological Support Unit (EMSU).
- (ii) A forecast by the staff meteorologist indicating localized meteorological conditions which inhibit dispersion for an extended period of time.

(2) Alert Stage

An Alert shall be declared by the Executive Secretary or Regional Director when any one of the following pollutant levels is reached at any monitoring site concurrent with:

- (i) Consultation with the national, local or staff meteorologist which indicates that an atmospheric stagnation exists and/or
- (ii) A determination by the Executive Secretary or Regional Director that the pollutant level is representative of air quality in a Region and the concentrations of pollutants can be expected to remain at the following indicated levels for 12 or more hours. Consultation with the air pollution control agencies of the affected jurisdictions will be accomplished to help evaluate local situations.

<u>POLLUTANT</u>	<u>AVERAGE</u>	<u>ug/m³</u>	<u>ppm</u>
SO ₂	24 hour	800	.3
Particulates	24 hour	375	(3.0 COH)
Product of SO ₂ x Particulates	24 hour	65,000	(.2 COH-ppm product)
CO	8 hour	17,000	15
Oxidants	1 hour	200	.1
NO ₂	1 hour	1,130	.6
	24 hour	282	.15

(3) Warning Stage

A Warning shall be declared by the Executive Secretary or Regional Director when any one of the following pollutant levels is reached at any monitoring site concurrent with:

- (i) Consultation with the national, local or staff meteorologist which indicates that an atmospheric stagnation exists and/or
- (ii) A determination by the Executive Secretary or Regional Director that the pollutant level is representative of air quality in a Region and the concentrations of pollutants can be expected to remain at the following indicated levels for 12 or more hours. Consultation with the air pollution control agencies of the affected jurisdictions will be accomplished to help evaluate local situations.

<u>POLLUTANT</u>	<u>AVERAGE</u>	<u>ug/m³</u>	<u>ppm</u>
SO ₂	24 hour	1,600	.6
Particulates	24 hour	625	5.0(COH)
Product of SO ₂ x Particulates	24 hour	261,000	(.8 COH-ppm product)
CO	8 hour	34,000	30.0

<u>POLLUTANT</u>	<u>AVERAGE</u>	<u>ug/m³</u>	<u>ppm</u>
Oxidants	1 hour	800	.4
NO ₂	1 hour	2,260	1.2
	24 hour	565	.30

(4) Emergency Stage

An emergency shall be declared by the Governor of the Commonwealth of Virginia when any one of the following pollutant levels is reached at any monitoring site concurrent with:

- (i) Consultation with the national, local or staff meteorologist which indicates that an atmospheric stagnation exists and/or
- (ii) A determination by the Executive Secretary or Regional Director that the pollutant level is representative of air quality in a Region and the concentrations of pollutants can be expected to remain at the following indicated levels for 12 or more hours. Consultation with the air pollution control agencies of the affected jurisdictions will be accomplished to help evaluate local situations.

<u>POLLUTANT</u>	<u>AVERAGE</u>	<u>ug/m³</u>	<u>ppm</u>
SO ₂	24 hour	2,100	.8
Particulates	24 hour	825	(7.0 COH)
Product of SO ₂ x Particulates	24 hour	393,000	(1.2 COH-ppm product)
CO	8 hour	46,000	40.0
Oxidants	1 hour	1,200	.6
NO ₂	1 hour	3,000	1.6
	24 hour	750	.4

(5) Termination

Termination of any existent stage of the Air Pollution Episode shall be called by the Governor of the Commonwealth of Virginia or the Executive Secretary or Regional Director based on:

- (i) Consultation with the national, local or staff meteorologist which indicates that the atmospheric conditions justify termination and/or
 - (ii) Appropriate reduction in pollutant levels. As the criteria for a given level are no longer being met, the next lower level will be assumed.
- (c) When the Executive Secretary or Regional Director determines that a specified criteria level is being approached and may be reached at one or more monitoring sites solely because of emissions from a limited number of sources, it may act to prevent the attainment of the episode level by notifying such source(s) that the preplanned abatement strategies of Table I, II, or III or the standby plans are required, insofar as it applies to such source(s), and shall be put into effect until a satisfactory reduction in the ambient pollution concentration has been achieved.
- (d) The Alert, Warning, and Emergency stages may be activated on the basis of deteriorating air quality alone; i.e., an atmospheric stagnation forecast need not be in effect, subject to the determinations specified in Section 6.702(b)(2)(ii), (b)(3)(ii), and (b)(4)(ii).

(8.0) 6.703 Standby Emission Reduction Plans

- (a) Any person responsible for the operation of an installation specifically identified in Tables I, II, and III of this section shall prepare standby emission reduction plans, consistent with good industrial practice and safe operating procedures, for reducing emissions creating air pollution during periods of Alert, Warning and Emergency. Standby emission reduction plans shall be designed to reduce or eliminate emissions in accordance with the objectives set forth in Tables I, II and III as applicable.
- (b) Any person responsible for the operation of a source of emissions not specifically identified under Section 6.703(a) shall, when requested by the Executive Secretary or Regional Director in writing, prepare standby emission reduction plans, consistent with good industrial practice and safe operating procedures, for reducing emissions creating air pollution during periods of Alert, Warning and Emergency. Standby emission reduction plans shall be designed to reduce or eliminate emissions in accordance with the objectives set forth in Tables I, II and III as applicable.

- (c) Standby emission reduction plans as required in Section 6.703(a) and (b) shall be in writing and show the source of emissions, the approximate amount of reduction of emissions to be achieved, the time necessary to achieve the reduction after being notified to implement the plan, and a description of the manner in which the reduction will be achieved during an Alert, Warning and Emergency period in accordance with the objectives set forth in Table I, II, and III. Such plans shall be submitted in the form specified by the Executive Secretary or the Regional Director.
- (d) During a condition of Alert, Warning or Emergency, standby emission reduction plans as required by this section shall be made immediately available on the premises to any person authorized to enforce regulations promulgated under terms of the Air Pollution Control Law of Virginia.
- (e) Standby emission reduction plans as required by this section shall be submitted to the Executive Secretary or Regional Director upon request within 30 days of the receipt of such request; such standby emission reduction plans shall be subject to review and approval by the Executive Secretary or Regional Director. If, in the opinion of the Executive Secretary or Regional Director, such standby emission reduction plans do not carry out the objectives set forth in Tables I, II, and III, the Executive Secretary or Regional Director may disapprove said standby emission reduction plans, state the reason for disapproval and recommend specific amendments to the proposed standby emission reduction plans. The revised plan shall be resubmitted within a time period specified by the Executive Secretary or Regional Director. Any person aggrieved by an order requiring the preparation of a revised plan shall be entitled to an appeal under the provisions of Title 10 of the Code of Virginia of 1950 as amended. If any person fails to submit a standby emission reduction plan within the time period specified, which in the opinion of the Executive Secretary or Regional Director does not carry out the objectives set forth in Table I, II and III, the Executive Secretary or Regional Director shall promulgate such standby emission reduction plan as will meet the objectives stated in Tables I, II and III herein. Such plan shall thereafter be the standby emission reduction plan which the person responsible shall put into effect upon the declaration by the Governor or the Executive Secretary or Regional Director of an air pollution episode Alert, Warning or Emergency.

(2.0) 6.704 Control Requirements

- (a) When the Executive Secretary or Regional Director declares an Air Pollution Alert, any person responsible for the operation of a source of air pollutants as set forth in Table I shall take

all Air Pollution Alert actions as required for such source of air pollutants and shall put into effect the preplanned abatement strategy for an Air Pollution Alert.

- (b) When the Executive Secretary or Regional Director declares an Air Pollution Warning, any person responsible for the operation of a source of air pollutants as set forth in Table II shall take all Air Pollution Warning actions as required for such source of air pollutants and shall put into effect the preplanned abatement strategy for an Air Pollution Warning.
- (c) When the Governor declares an Air Pollution Emergency, any person responsible for the operation of a source of air pollutant as described in Table III shall take all Air Pollution Emergency actions as required for such source of air pollutants and shall put into effect the preplanned abatement strategy for an Air Pollution Emergency.
- (d) When the Executive Secretary or Regional Director determines that a specified criteria level has been reached at one or more monitoring sites solely because of emissions from a limited number of sources, he shall notify such source(s) that the preplanned abatement strategies of Tables I, II, and III of the standby plans are required, insofar as it applies to such source(s), and shall be put into effect until the criteria of the specified level are no longer met.
- (e) When the Executive Secretary or Regional Director determines that a specific pollutant level caused the declaration of an Alert or Warning Stage and that curtailment of emissions from certain sources would have no effect on that pollutant level, he may exercise good judgment in determining which abatement strategies shall be put into effect.

(2.0) 6.705 Participation of Local Air Pollution Control Offices

- (a) Local Air Pollution Control Officers shall develop local plans which will establish standard operating procedures and allocation of responsibilities (including public relations) to be placed in effect in the event of an air pollution episode. A copy of such plans and any subsequent changes to the plans shall be furnished to the Executive Secretary and the local Regional Office of the State Board.
- (b) The statewide Episode Control Center will be located in Richmond. Operational, communication, and public relations procedures for the control of Air Pollution Episodes by the State Episode Control Center will be promulgated by the Executive Secretary to all local air pollution control agencies and regional offices.

TABLE I
ABATEMENT STRATEGIES EMISSION REDUCTION PLANS
ALERT LEVEL

Part A. GENERAL

1. There shall be no open burning by any persons of tree waste, vegetation, refuse, or debris in any form.
2. The use of incinerators for the disposal of any form of solid waste shall be limited to the hours between 12:00 noon and 4:00 p.m.
3. Persons operating fuel-burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12:00 noon and 4:00 p.m.
4. Persons operating motor vehicles should eliminate all unnecessary operations.

Part B. SOURCE CURTAILMENT

Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for this Alert level.

<u>Source of Air Pollution</u>	<u>Control Action</u>
1. Coal or oil-fired electric power generating facilities.	a. Substantial reduction by utilization of fuels having low ash and sulfur content. b. Maximum utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing. c. Substantial reduction by diverting electric power generation to facilities outside of Alert Area.
2. Coal and oil-fired process steam generating facilities.	a. Substantial reduction by utilization of fuels having low ash and sulfur content.

Source of Air Pollution

Control Action

3. Manufacturing industries of the following classifications:

Primary Metal Industry.
Petroleum Refining Operations.
Chemical Industries.
Mineral Processing Industries.
Paper and Allied Products.
Grain Industry.

- b. Maximum utilization of midday (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing.
- c. Substantial reduction of steam load demands consistent with continuing plant operations.
- a. Substantial reduction of air pollutants from manufacturing operations by curtailing, postponing, or deferring production and all operations.
- b. Maximum reduction by deferring trade waste disposal operations which emit solid particles, gas vapors or malodorous substances.
- c. Maximum reduction of heat load demands for processing.
- d. Maximum utilization of midday (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing.

TABLE II
EMISSION REDUCTION PLANS
WARNING LEVEL

Part A. GENERAL

1. There shall be no open burning by any persons of tree waste, vegetation, refuse, or debris in any form.
2. The use of incinerators for the disposal of any form of solid waste or liquid waste shall be prohibited.
3. Persons operating fuel-burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12:00 noon and 4:00 p.m.
4. Persons operating motor vehicles must reduce operations by the use of car pools and increased use of public transportation and elimination of unnecessary operation.

Part B. SOURCE CURTAILMENT

Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for this Warning Level.

Source of Air Pollution

Control Action

- | | |
|--|---|
| 1. Coal or oil-fired electric power generating facilities. | <ol style="list-style-type: none">a. Maximum reduction by utilization of fuels having lowest ash and sulfur content.b. Maximum utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing.c. Maximum reduction by diverting electric power generation to facilities outside of Warning Area. |
| 2. Oil and oil-fired process steam generating facilities. | <ol style="list-style-type: none">a. Maximum reduction by utilization of fuels having the lowest available ash and sulfur content. |

- b. Maximum utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing.
 - c. Making ready for use a plan of action to be taken if an emergency develops.
 3. Manufacturing industries which require considerable lead time for shut-down including the following classifications:
 - Petroleum Refining.
 - Chemical Industries.
 - Primary Metals Industries.
 - Glass Industries.
 - Paper and Allied Products.
 - a. Maximum reduction of air contaminants from manufacturing operations by, if necessary, assuming reasonable economic hardships by postponing production and allied operation.
 - b. Maximum reduction by deferring trade waste disposal operations which emit solid particles, gases, vapors, or malodorous substances.
 - c. Maximum reduction of heat load demands for processing.
 - d. Maximum utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing.
 4. Manufacturing industries which require relatively short lead times for shut-down including the following classifications:
 - Primary Metals Industries.
 - Chemical Industries.
 - Mineral Processing Industries.
 - Grain Industry.
 - a. Elimination of air pollutants from manufacturing operations by ceasing, curtailing, postponing, or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment.
 - b. Elimination of air pollutants from trade waste disposal processes which emit solid particles, gases, vapors, or malodorous substances.
 - c. Maximum reduction of heat load demands for processing.

- d. Maximum utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

TABLE III
EMISSION REDUCTION PLANS
EMERGENCY LEVEL

Part A. GENERAL

1. There shall be no open burning by any persons of tree waste, vegetation, refuse, or debris in any form.
2. The use of incinerators for the disposal of any form of solid or liquid waste shall be prohibited.
3. All places of employment described below shall immediately cease operations.
 - a. Mining and quarrying of nonmetallic minerals.
 - b. All construction work except that which must proceed to avoid emergent physical harm.
 - c. All manufacturing establishments except those required to have in force an air pollution emergency plan.
 - d. All wholesale trade establishments; i.e., places of business primarily engaged in selling merchandise to retailers, or industrial, commercial, insitutional or professional users, or to other wholesalers, or acting as agents in buying merchandise for or selling merchandise to such persons or companies, except those engaged in the distribution of drugs, surgical supplies and food.
 - e. All offices of local, county, and State government including authorities, joint meetings, and other public bodies excepting such agencies which are determined by the chief administrative officer of local, county, or State government, authorities, joint meetings and other public bodies to be vital for public safety and welfare and the enforcement of the provisions of this order.
 - f. All retail trade establishments except pharmacies, surgical supply distributors, and stores primarily engaged in the sale of food.
 - g. Banks, credit agencies other than banks, securities and commodities brokers, dealers, exchanges and services; offices of insurance carriers, agents and brokers, real estate offices.

- h. Wholesale and retail laundries, laundry services and cleaning and dyeing establishments; photographic studios; beauty shops, barber shops, shoe repair shops.
 - i. Advertising offices; consumer credit reporting, adjustment and collection agencies; duplicating, addressing, blueprinting; photocopying, mailing, mailing list and stenographic services; equipment rental services, commercial testing laboratories.
 - j. Automobile repair, automobile services, garages.
 - k. Establishments rendering amusement and recreational services including motion picture theaters.
 - l. Elementary and secondary schools, colleges, universities, professional schools, junior colleges, vocational schools, and public and private libraries.
4. All commercial and manufacturing establishments not included in this order will institute such actions as will result in maximum reduction of air pollutants from their operation by ceasing, curtailing, or postponing operations which emit air pollutants to the extent possible without causing injury to persons or damage to equipment.
 5. The use of motor vehicles is prohibited except in emergencies with the approval of local or State police.

Part B. SOURCE CURTAILMENT

Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for this Emergency Level.

<u>Source of Air Pollution</u>	<u>Control Action</u>
1. Coal or oil-fired electric power generating facilities.	a. Maximum reduction by utilization of fuels having lowest ash and sulfur content. b. Maximum utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing. c. Maximum reduction by diverting electric power generation to facilities outside of Emergency Area.

2. Coal and oil-fired process steam generating facilities.
 - a. Maximum reduction by reducing heat and steam demands to absolute necessities consistent with preventing equipment damage.
 - b. Maximum utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing.
 - c. Taking the action called for in the emergency plan.
3. Manufacturing industries of the following classifications.

Primary Metals Industries.
 Petroleum Refining.
 Chemical Industries.
 Mineral Processing Industries.
 Grain Industry.
 Paper and Allied Products.

 - a. Elimination of air pollutants from manufacturing operations by ceasing, curtailing, postponing or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment.
 - b. Elimination of air pollutants from trade waste disposal processes which emit solid particles, gases, vapors, or malodorous substances.
 - c. Maximum reduction of heat load demands for processing.
 - d. Maximum utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

APPENDIX A
MAJOR POLLUTANT SOURCES

CHEMICAL PROCESS INDUSTRIES

Adipic acid
Ammonia
Ammonium nitrate
Carbon black
Charcoal
Chlorine
Detergent and soap
Explosives (TNT and nitrocellulose)
Hydrofluoric acid
Nitric acid
Paint and varnish manufacturing
Phosphoric acid
Phthalic anhydride
Plastics manufacturing
Printing ink manufacturing
Sodium carbonate
Sulfuric acid
Synthetic fibers
Synthetic rubber
Terephthalic acid

FOOD AND AGRICULTURAL INDUSTRIES

Alfalfa dehydrating
Ammonium nitrate
Coffee roasting
Cotton ginning
Feed and grain
Fermentation processes
Fertilizers
Fish meal processing
Meat smoke houses
Starch manufacturing
Sugar cane processing

METALLURGICAL INDUSTRIES

Primary metals industries:

Aluminum ore reduction
Copper smelters
Ferroalloy production
Iron and steel mills
Lead smelters
Metallurgical coke manufacturing
Zinc

Secondary metals industries:

Aluminum operations
Brass and bronze smelting
Ferroalloys
Gray iron foundries
Lead smelting
Magnesium smelting
Steel foundries
Zinc processes

MINERAL PRODUCTS INDUSTRIES

Asphalt roofing
Asphaltic concrete batching
Bricks and related clay refractories
Calcium carbide
Castable refractories
Cement
Ceramic and clay processes
Clay and fly ash sintering
Coal cleaning
Concrete batching
Fiberglass manufacturing
Frit manufacturing
Glass manufacturing
Gypsum manufacturing
Lime manufacturing
Mineral wool manufacturing
Paperpulp manufacturing
Perlite manufacturing
Phosphate rock preparation
Rock, gravel, and sand quarrying
and processing

PETROLEUM REFINING AND PETROCHEMICAL
OPERATIONS

WOOD PROCESSING

PETROLEUM STORAGE (Storage tanks
bulk terminals)

MISCELLANEOUS

Fossil fuel steam electric power
plants
Municipal or equivalent incinerators
Open burning dumps

VIRGINIA STATE REGULATIONS
EXCEPT NATIONAL CAPITAL
AIR QUALITY CONTROL REGION

SECTION I

(1.0) 1.00 DEFINITIONS

1.01 Certain Terms Defined

For the purpose of subsequent rules and regulations adopted or orders issued by the State Air Pollution Control Board under the provisions of Chapter 1.2, Title 10, Code of Virginia of 1950, as amended, the following additional words or terms shall have the meanings indicated:

AIR POLLUTION. The presence in the outdoor atmosphere of one or more substances which are or may be harmful or injurious to human health, welfare or safety, to animal or plant life, or to property, or which unreasonably interfere with the enjoyment by the people of life or property.

AIR POLLUTION EMERGENCY EPISODE. Meteorological conditions, generally temperature inversion, that reduces the effective volume of air in which the contaminants are diluted and as a result air pollution may reach levels that would cause imminent and substantial endangerment to the health of persons.

AIR POLLUTION CONTROL OFFICER. The agent or official of the local government designated by the governing body to enforce the local air pollution control ordinance within the local jurisdiction, or designated representatives of the State Board. Sometimes referred to as "Control Officer."

AIR QUALITY. The specific measurement in the ambient air of a particular air contaminant at any given time.

AIR TABLE. A source consisting of a device using a gaseous separating medium for the primary purpose of improving the product quality.

AMBIENT AIR. The surrounding or outside air.

AMBIENT AIR QUALITY STANDARD - PRIMARY. Air quality which, allowing an adequate margin of safety, is requisite to protect the public health.

AMBIENT AIR QUALITY STANDARD - SECONDARY. Air quality which is requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of air contaminants in the ambient air.

AREA SOURCE. Any small residential, governmental, institutional, commercial, or industrial fuel combustion operations; onsite waste disposal facility; motor vehicle, aircraft, vessels, or other transportation facilities, or other miscellaneous sources.

BACHARACH SCALE. A graduated scale of shades of gray going from 0 through 10, with 0 being white and 10 being dense black, developed by the Bacharach Industrial Instrument Company and used to evaluate particulate matter in flue gas samples.

BEEHIVE COKE OVEN. A source consisting of an arched, beehive shaped, oven in which heat is supplied by partial combustion of the coal within the oven chambers and in which destructive distillation of coal occurs with no recovery of by-products.

BOARD. The State Air Pollution Control Board, sometimes hereinafter referred to as "Board" or "State Board."

BY-PRODUCT COKE PLANT. A source consisting of a plant, oven or device used in connection with the distillation process to produce coke. Such plant consists of, but is not limited to, coal and coke handling equipment, by-product chemical plant and other equipment associated with and attendant to the coking chambers or ovens making up a single battery operated and controlled as a single unit.

CHEMICAL FERTILIZER. A compound or mixture whose chief ingredients are nitrogen, phosphorous, or potassium; or any combination of these ingredients, and having agronomic value.

COAL PREPARATION. A source consisting of, but not limited to, coal crushing, screening, washing, drying and air separation operations used for the purpose of preparing the product for marketing.

COAL REFUSE. Any waste coal, rock, shale, culm, boney, slate, clay and related materials, associated with or near a coal seam, which are either brought above ground or otherwise removed from the mine in the process of mining coal, or which are separated from coal during the cleaning or preparation operations, provided, however, that coal refuse shall not mean overburden from strip mining operations or rock from mine shafts and mine tunnels.

COAL REFUSE DISPOSAL AREA. Any source or potential source consisting of any area or plot of land used as a place for dumping, storage, or disposal of coal refuse. A coal refuse pile must be contained in a single coal refuse disposal area; however, a coal refuse disposal area may contain two or more coal refuse piles if the area is so designated.

COAL REFUSE PILE. Any source consisting of any deposit of coal refuse on or buried in the earth and intended as permanent disposal of or long-term storage of such material. Continuous deposits of coal refuse and deposits not separated by an approved method shall be considered as a single coal refuse pile.

COMBUSTION INSTALLATION. A source consisting of any furnace, oven, kiln, incinerator, fuel burning equipment, or any other stationary equipment in which solid, liquid, or gaseous materials are burned.

COMMENCING NEW SOURCE. Any substantial financial commitment relating to the design criteria concerning preparation of a new site, or the beginning of a modification. (See definition of Existing Source, Modification and New Source.)

CONSTRUCTION. Fabrication, erection, or installation of a source.

CONTAMINANT. Smoke, dust, soot, grime, carbon, or any other particulate matter, radioactive matter, noxious gas, acids, fumes, gases, odor, vapor, or any combination thereof,

CONTROL PROGRAM. Control program submitted to the Board, voluntarily or upon request of the Board, by the owner of an existing and/or proposed new source, to establish pollution abatement goals and time schedules to achieve such goals, so as to ensure compliance by the owner with standards, policies and regulations adopted by the Board. In accordance with Section 10-17.21 of the Air Pollution Control Law of Virginia the control program will include such system and equipment information and projected operating performance as is required by the Board for evaluation of the probability of achieving goals of the control program.

DIRECTOR. The Director or Executive Secretary of the State Air Pollution Control Board.

DUST. Solid particles projected into the air by natural forces, such as wind, volcanic eruption, or earthquake, and by mechanical or manmade processes such as crushing, grinding, milling, drilling, demolition, shoveling, conveying, screening, bagging, and sweeping.

EFFLUENT WATER SEPARATOR. Any source consisting of any tank, box, sump, or other container in which any volatile organic compound floating on or entrained or contained in water entering such tank, box, sump, or other container is physically separated and removed from such water prior to outfall, drainage, or recovery of such water.

EXISTING SOURCE. Any source which is in being or is defined as a commencing new source on the effective date of these regulations or on which construction or modification has been commenced; except that any such existing source or any emission point from such existing source (where such source involves multiple emission points) which is modified after the effective date of these regulations shall be reclassified as a "new source." (See definition of Commencing New Source or Modification, Modification, and New Source.)

FLY ASH. Particulate matter capable of being gas-borne or airborne and consisting of fused ash and partially burned or unburned fuel or other material from a combustion installation.

FOUNDRY CUPOLA. A shaft type furnace used for melting of metals, consisting of, but not limited to, furnace proper, tuyeres, fans, or blowers, tapping spout, charging equipment, gas cleaning devices and other auxiliaries.

FOUNDRY OPEN HEARTH. A furnace in which the melting and refining of metal is accomplished by the application of heat to a saucer type or shallow hearth in a closed chamber, consisting of, but not limited to, the furnace proper, checkers, flues, and stacks and other auxiliaries.

FUEL-BURNING EQUIPMENT. A source consisting of any furnace, and all appurtenances thereto, used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat transfer.

FUGITIVE DUST. Solid airborne particulate matter or dust emitted from any source other than a flue or stack.

FUMES. Minute particulate matter generated by the condensation of vapors from solid matter after volatilization from the molten state, or generated by sublimation, distillation, calcination or chemical reaction when these processes create airborne particles.

FURNACE. An enclosed space provided for combustion.

GASOLINE. Any petroleum distillate having a Reid vapor pressure in the range of four (4) to fifteen (15) pounds at 100 degrees F.

GASES. Formless fluids which, under standard conditions, occupy the space of enclosure and which can be changed to the liquid or solid state only by the combined effect of increased pressure and decreased temperature.

HAZARDOUS AIR CONTAMINANT. An air contaminant to which no ambient air quality standard is applicable and which may cause, or contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness.

HEATING VALUE. The heat released by combustion of one pound of fuel or other material measured in British Thermal Units (BTU) on an as received basis.

INCINERATOR. Any source consisting of a furnace and all appurtenances thereto designed for the destruction of refuse by burning. "Open Burning" is not considered incineration. For purposes of these rules, the destruction of any combustible liquid or gaseous material by burning in a flare or flare stack shall be considered incineration.

MANUFACTURING OPERATION. Any source consisting of any process or combination of physically connected dissimilar processes which is operated to effect physical and/or chemical changes in an article.

MATERIALS HANDLING EQUIPMENT. Any source consisting of any equipment used as a part of a process or combination of processes which does not effect a physical or chemical change in the material or in an article, such as, but not limited to, conveyors, elevators, feeders, or weighers.

MELT TIME. The time in which the metal is melting and available at the spout or tap hole, excluding any time the equipment is idle, preheating or preparing for shutdown.

MIST. A state of atmospheric obscurity produced by suspended liquid droplets.

MOBILE SOURCES. Any vehicle, including, but not limited to any motor vehicle, truck, or other land craft, air craft, locomotive, bus or ship, rail vehicle, or water craft, which emits or may emit any air contaminant.

MODIFICATION. Any physical change in, or change in the method of operation of, a stationary source which increased the amount of any air contaminant (to which a standard applies) emitted by such source or which results in the emission of any air contaminant (to which a standard applies) not previously emitted, except that:

- (1) Routine maintenance, repair and replacement shall not be considered physical changes, and
- (2) The following shall not be considered a change in the method of operation:
 - (i) A change in the production rate, if such change does not increase the emission of contaminants (to which a standard applies) or which results in the emission of contaminants (to which a standard applies) not previously emitted;
 - (ii) An increase in hours of operation;
 - (iii) Use of an alternative fuel or raw material if prior to the date of these regulations the source was designed to accomodate such alternative use. (See definition of Commencing New Source or Modification, Existing Source, and New Source.)

MOTOR VEHICLE. Any powered conveyance normally licensed by the Virginia Division of Motor Vehicles.

NEW SOURCE. Any source the construction or modification of which is commenced on or after the effective date of these regulations; or for the specific stationary sources covered by the "Federal Standards of Performance for New Stationary Sources," the date promulgated will apply; and any source relocated from an approved site. (See definition of Commencing New Source or Modification, Existing Source, and Modification.)

ODOR. The sensation resulting from stimulation of the human sense of smell.

OPACITY. The characteristic of a substance which renders it partially or wholly impervious to rays of light. Opacity as used herein generally refers to the obscurity of an observer's view.

OPEN BURNING. The burning of any matter in such a manner that the products of combustion resulting from the burning are emitted directly into the ambient air without passing through a stack, duct, or chimney.

OWNER. State, a county, sanitary district, municipality, political subdivision, a public or private institution, corporation, association, firm or company organized or existing under the laws of this or any other state or county, lessee, or person otherwise in possession of property, any person or individual, or group of persons or individuals, acting individually or as a group.

PARTICULATE MATTER. Any material, except water in uncombined form, that is airborne and exists as a liquid or a solid in the atmosphere. Particulate matter is sometimes hereinafter referred to as "particulate."

PERSON. Any individual, corporation, cooperative, partnership, firm, association, trust, estate, public or private institution, group, agency, political subdivision of this State or any legal successor, representative, agent or agency of the foregoing.

PHYSICALLY CONNECTED. Any combination of processes connected by materials handling equipment and designed for simultaneous complementary operation.

POINT SOURCE.

- (1) Any stationary source causing emissions in excess of 100 tons per year of any contaminant for which there is a national standard in a region containing an area whose 1970 "urban place" population, as defined by the U. S. Bureau of the Census, was equal to or greater than 1 million,

- (2) Any stationary source causing emissions in excess of 25 tons per year of any contaminant for which there is a national standard in a region containing an area whose 1970 "urban place" population, as defined by the U.S. Bureau of the Census, was less than 1 million,
- (3) Without regard to amount of emissions, stationary sources such as those listed in Appendix A.

PROCESS OPERATIONS. Any source consisting of any method, form, action, operation, or treatment of manufacturing or processing, and shall include any storage or handling of materials or products before, during or after manufacturing or processing.

PROCESS UNIT. Any step in a manufacturing operation which results in the emission of particulate matter to the atmosphere.

PROCESS WEIGHT. Total weight of all materials introduced into any source process unit which may cause any emissions of particulate matter. Process weight includes solid fuels charged, but does not include liquid and gaseous fuels charged or combustion air for all fuels.

PROCESS WEIGHT RATE. A rate established as follows:

- (a) For continuous or long-run steady-state source operations, the total process weight for the entire period of continuous operation or for a typical portion thereof, divided by the number of hours of such period or portion thereof,
- (b) For cyclical or batch unit operations, or unit processes, the total weight for a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period.

Where the nature of any process operation or the design of any equipment is such as to permit more than one interpretation of this definition, the interpretation which results in the minimum value for allowable emission shall apply.

PRODUCTION RATE. The weight of final product obtained per hour of operation. If the rate of product going to storage can vary the production rate shall be determined by calculation from the feed rates of raw material.

REFUSE. Includes garbage, rubbish and trade wastes;

- (1) Garbage. Animal and vegetable matter such as that originating in houses, kitchens, restaurants, and hotels, produce markets, food service or processing establishments, greenhouses, and hospitals, clinics or veterinary facilities.

- (2) Rubbish. Solids not considered to be highly flammable or explosive such as, but not limited to, rags, old clothes, leather, rubber, carpets, wood, excelsior, paper, ashes, tree branches, yard trimmings, furniture, metal food containers, glass, crockery, masonry, and other similar materials.
- (3) Trade Waste. All solid or liquid material resulting from construction, building operations, or the prosecution of any business, trade or industry such as, but not limited to, plastic products, chemicals, cinders and other forms of solid or liquid waste materials.

RINGELMANN CHART. A chart published as U. S. Bureau of Mines Information Circular 8333, dated May, 1967.

SALVAGE OPERATIONS. Any source consisting of any business, trade or industry engaged in whole or in part in salvaging or reclaiming any product or material, such as, but not limited to, reprocessing of used motor oils, metals, chemicals, shipping containers, or drums, and specifically including automobile graveyards and junkyards as defined in Sec. 33-279.3 of the Code of Virginia of 1950, as amended.

SCREENING EQUIPMENT. Any equipment or device designed or used for the purpose of effecting particle size separations of materials.

SMOKE. Small gasborne particulate matter consisting predominantly but not exclusively of carbon, ash and other material in concentrations sufficient to form a visible plume.

SOILING INDEX. A measure of the soiling properties of suspended particles in air determined by drawing a measured volume of air through a known area of Whatman No. 4 filter paper for a measured period of time (normally two hours) expressed on COH's/1000 linear feet.

SOURCE. Any and all points of origin of emission of air contaminants, whether privately or publicly owned or operated, or person contributing to emission of air contaminants. Without limiting the generality of the foregoing, this term includes all types of business, commercial and industrial plants, works, shops and stores, and heating and power plants or stations, buildings and other structures of all types.

STACK OR CHIMNEY. Any flue, conduit, or duct arranged to conduct emissions into the atmosphere.

STANDARD CONDITIONS. Dry gas temperature of 70 degrees Fahrenheit and a gas pressure of 14.7 pounds per square inch absolute.

STANDARD OF PERFORMANCE. Degree of air contaminant emission limitation achievable through the application of the best system of emission reduction which the Board determines has been adequately demonstrated.

STATIONARY SOURCE. Sources other than mobile sources.

SUBMERGED FILL PIPE. Any fill pipe the discharge opening of which is entirely submerged when the liquid level is 6 inches above the bottom of the tank; or when applied to a tank which is loaded from the side, shall mean that the fill pipe is adequately covered at all times during normal working of the tank.

SUPERPHOSPHATE. The product resulting from a controlled reaction between sulfuric acid and phosphate rock, and having agronomic value.

THERMAL DRIER. A device using fuel burning equipment for the primary purpose of reducing the moisture content of materials.

VOLATILE ORGANIC COMPOUND. Any compound, containing carbon and hydrogen or containing carbon and hydrogen in combination with any other element, which has a vapor pressure of 2.5 pounds per square inch absolute or greater under actual storage conditions. (Kerosene and fuel oil used for household heating have vapor pressures of less than 1.5 pounds per square inch absolute under actual storage conditions; therefore kerosene and fuel oil are not considered as Volatile Organic Compounds.)

Unless specifically defined in the Law or in the Regulations of the Board, the technical terms used by the Board have the meanings commonly ascribed to them by recognized authorities.

The defined terms included in this Section (1.00) are underlined in the Regulations to emphasize that the term has a defined meaning.

SECTION II

(2.0) 2.00 Procedures

(2.0) 2.01 Regulations

(a) Establishment

Regulations for the control and abatement of air pollution are adopted, amended, or repealed only after:

- (1) Thorough study of the need and technical requirements by the Staff of the Board and, when required, by the State Technical Advisory Committee on Air Pollution.
- (2) Public hearing.
- (3) Thorough study of comments made by the public.
- (4) Adoption by the Board at a public meeting.

(b) Effective Date

No regulation, rule, amendment, or repeal will become effective until sixty days after adoption by the Board.

(c) Enforcement of Regulations

- (1) Whenever the Executive Secretary or his representative has reason to believe that a violation of any of the Regulations promulgated by the Board has occurred, notice shall be served on the alleged violator or violators, citing the Regulation involved and the facts on which the notice is based, and shall order that necessary corrective action be taken within a reasonable time. Such corrective action shall mean the cessation of the violation, or an agreement to proceed under an approved control program, or an application to the Board for a variance, or a combination of these actions as directed by the Executive Secretary. The Executive Secretary may act as the agent of the Board to obtain legal remedy should any owner fail to comply with such an order, pursuant to Sec. 10-17.23 of the Code of Virginia.
- (2) Nothing in this section shall prevent the Executive Secretary from making efforts to obtain voluntary compliance through conference, warning, or other appropriate means.

(d) Special Orders

The Board shall have the power to issue Special Orders pursuant to Sec. 10-17.18:1 of the Code of Virginia, as amended.

(e) Hearings

- (1) Hearings by the Board may take either of the following forms:

- (i) The public hearing required before considering rules and regulations or before considering variances and accordance with Sec. 10-17.18(b) and (c) of the Code of Virginia of 1950 as amended.

A public hearing may be held in connection with a regular or special meeting of the Board. The procedure for a public hearing shall conform to Sec. 9-6.6 except as modified by Sec. 10-17.18(b) and (c) of the Code of Virginia, as amended.

- (ii) The formal hearing for the determination of violations and the enforcement or review of its orders, rules and regulations in accordance with Sec. 10-17.18(d) of the Code of Virginia of 1950 as amended.

A formal hearing shall be conducted as part of the business of a regular or special meeting of the Board. The procedure for a formal hearing shall conform to Sec. 9-6.10 through 9-6.12 except as modified by Sec. 10-17.18(d) of the Code of Virginia as amended.

- (2) Record of the Hearings by the Board may take any of the following forms:

- (i) Oral statements or testimony at any hearing may be stenographically or electronically recorded for transcription to written form.

- (ii) Formal hearings will be recorded by a court reporter.

- (3) Availability of Record of the Hearings by the Board.

- (i) A copy of the transcript of public hearing, if transcribed, will be provided within a reasonable time to any person upon written request and payment of the cost; if not transcribed, cost of preparation will be borne by person making request.

- (ii) Any person desiring a copy of the transcript of formal hearings recorded by a court reporter may make arrangements directly with the court reporter to purchase such copies.

(2.0) 2.02 Local Ordinances

(a) Ordinances

The governing body of any locality proposing to adopt an ordinance, or an amendment to an existing ordinance, relating to air pollution shall first obtain the approval of the Board as to the provisions of any such ordinance or amendment. The provisions of any such ordinance must be as strict as the State or regional regulations, whichever is applicable. The Board in approving local ordinances will consider such factors as, but not limited to,:

- (1) The local ordinance must provide for intergovernmental cooperation and exchange of information.
- (2) Information must be provided giving local resources which will be committed to the enforcement of the proposed local ordinance and those resources committed must be reasonably adequate to achieve the goals for which the ordinance is designed.

Approval of any local ordinance may be withdrawn if the Board determines that the local ordinance is not as strict as State or regional regulations. Where an amendment to a State or regional regulation causes a local ordinance to be less strict a reasonable (but not more than 6 months) time will be allowed for the locality to amend its ordinance. A local governing body may grant a variance to any of its air pollution control ordinances providing a public hearing is held before doing so. Notice of public hearings on applications for variances must be advertised at least fifteen (15) days prior to the date of the hearing.

(b) Reports

Local ordinances will make provision for reporting to the Board such data as may be required in carrying out its responsibilities under the Code of Virginia of 1950, as amended, and the Clean Air Act. Such reports will include, but are not limited to: monitoring data, surveillance programs, procedures for investigation of complaints, variance hearings, and status of control programs.

(c) Relationship to State or Regional Regulations*

Local ordinances are a supplement to State or Regional regulations which have been adopted, or may in the future be adopted or amended, by the Board in accordance with Section 10-17.18 and 10-17.30 of the Code of Virginia of 1950, as amended. Any provisions of local ordinances which have been approved by the Board and are more strict than the State or regional regulations shall take precedence over such regulations within the respective political subdivisions. It is the intention of the Board to coordinate activities among the enforcement officers of the various localities in the enforcement of State and regional regulations. The Board will also provide technical and other assistance to local authorities in the development of air quality or emission standards, in the investigation and study of air pollution problems, and in the enforcement of local ordinances and State and regional regulations.

The Board emphasizes its intention to assist in the local enforcement of local ordinances. The Board reserves the right, however, to hear appeals from any party aggrieved by any regulation, order or requirement issued with respect to State or regional regulations, conduct investigations, and issue any appropriate orders.

(3.0) 2.03 Registration

- (a) By June 30, 1972 all persons owning and/or operating any existing point source shall have registered such source operations with the Board. The information required for registration shall be determined by the Board, and shall be provided in the manner specified by the Board.
- (b) Persons owning and/or operating registered sources to be modified shall comply with Section 2.06.

(6.0) 2.04 Date of Compliance

Except as otherwise specified, compliance with the provisions of these regulations shall be according to the following schedule.

* Air pollution control is a problem of balancing the equities involved for the total good of the community. An ill-conceived program to control air pollutant emissions might well be more damaging than the original problem. Any regulation should be sufficiently flexible to allow each community's needs to be served; therefore, it is intended that primary enforcement of these Regional Regulations should be at the local government level.

- (a) New Point Sources. All new point sources constructed after the effective date of these regulations shall comply as of going into operation.
- (b) Existing Point Sources. All existing point sources not in compliance as of the effective date of these regulations, shall be in compliance by June 30, 1972. If compliance is not possible by June 30, 1972, the owner or person responsible for the operation of the installation shall have submitted by this date to the Board in a form and manner satisfactory to the Board a control program and schedule to contain a date on or before which full compliance will be attained. In no event can this date be later than June 30, 1975. If approved by the Board, such date will be the date on which the person shall comply. The Board may require persons submitting such a program to submit periodic reports on progress in achieving compliance. Reports shall be submitted in form and manner prescribed by the Executive Secretary or his representative.

(2.0) 2.05 Action on Control Programs

(a) General

- (1) Pursuant to Section 10-17.18(c) of the Virginia Air Pollution Control Law, the Board may in its discretion grant variances to any provision of these regulations after a public hearing in accordance with Section 2.04(a)(1). When acting upon variances, the Board shall be guided by the provisions of Sections 10-17.18(e) and (f) of the Virginia Air Pollution Control Law.
- (2) Notices of public hearings on applications for variances shall be advertised in at least one major newspaper of general circulation in the Air Quality Control Region affected at least 30 days prior to the date of the hearing.
- (b) The owner shall be furnished copies of any objections by the Board to the control program and may submit answers and comments, in duplicate, to the Board on such objections.
- (c) The Board will consider the owner's answers and comments to any objections, and shall notify the owner in writing its reasons for conditional approval, or denial, of the control program.
- (d) If a control program is denied or conditionally approved, an owner may, by filing a request within 30 days from the date he received notice of denial or conditional approval, request a rehearing which shall be conducted as a formal hearing pursuant to Section 2.01 (e) of these regulations, from which judicial review pursuant to Virginia Code Sec. 10-17.23:2 shall be available.

(3.0) 2.06 Permit to Construct and/or Modify and Operate

(a) General Requirements

Commencing on the effective date of these regulations, no owner shall cause or permit the commencement of construction of a new source or modification of any source without first obtaining from the Board a permit approving the location and basic pollution control design criteria of the proposed new source or the modification of an existing source and its operation.

(b) Applications

- (1) Application for authority to construct or modify and to operate shall be made in the following manner. If the applicant is a partnership, other than a corporation, a general partner shall sign the application. If the applicant is a corporation, association, or cooperative, an officer shall sign the application. If the applicant is a sole proprietorship, the proprietor shall sign the application.
- (2) A separate application is required for each source subject to these regulations. The applicant may be required to furnish additional information deemed necessary by the Board.
- (3) Each application shall be signed under oath.

(c) Information Required

- (1) Each application for permit to construction or modify and to operate a source shall include such information as may be required by the Board to analyze the effect of the proposed source on the ambient air quality standard of the area and the emission standards which are applicable. The information required would include not less than (but is not limited to) the following:
 - (i) siting information
 - (ii) general description of plant or modifications
 - (iii) complete information regarding proposed air pollution control facilities, and an inventory of type and quantity of contaminants to be emitted.

(d) Standards for Granting Permit

No permit to construct or modify and to operate will be granted unless the applicant shows to the satisfaction of the Board that:

- (1) The source will be designed and will be constructed or modified to operate without causing a violation of the applicable regulations.
- (2) The source will be designed, built and equipped in accordance with established Federal Standards of Performance, or if none are applicable, with standards of performance established by the Board.
- (3) The source, as designed or modified, does not endanger maintenance or attainment of any applicable ambient air quality standard.
- (4) The source, if required by the Board, shall be provided with:
 - (i) sampling ports of a size, number, and location as the Board may specify,
 - (ii) safe access to each port,
 - (iii) instrumentation to monitor and record emission levels,
 - (iv) any other sampling and testing facilities the Board may permit or require.
- (5) If the air pollution control facilities do not achieve the emission limitations stated in Sec. 2.06 (e) temporary operation and corrections will be in accordance with Sec. 2.06 (f) (2).

(e) Action on Permit Applications

The actions of the Board shall include:

- (1) Confirmation with Section 2.05
- (2) Stating in its written approval to the applicant the emission limitations acceptable to it during performance testing in accordance with Section 2.06 (f).

(f) Performance Testing and Compliance

- (1) Within 60 days after placing a new or modified source into operation, the owner shall schedule tests of the emissions in the manner acceptable to the Board. These tests may be witnessed by a representative of the Board.
- (2) In case the performance does not meet the emission limitations specified in Section 2.06 (e)(2), the Executive Secretary or his representative may allow a reasonable period for

adjustment. If such adjustment is not successful, the owner shall, upon instruction by the Executive Secretary or his representative:

- (i) submit a control program designed to meet the emission limitation specified in Section 2.06 (e) (2).
- (ii) limit production rate to meet the emission limitation specified in Section 2.06 (e) (2).

(g) Exceptions

A permit to construct and operate will not be required for:

- (1) The installation or alteration of an air contaminant detector, air contaminant recorder, combustion controller, or combustion shutoff controls.
- (2) Air conditioning or ventilating systems not designed to remove air contaminant generated by or released from such equipment.
- (3) Low capacity fuel burning equipment, such as: process smoke house generators; devices that use gas as a fuel for air conditioning or heating water; heating devices using solid fuel for space heating with a BTU input of less than 350,000 BTU per hour; or heating devices using gas or oil fuel for space heating with a BTU input of less than 1,000,000 BTU per hour.
- (4) Internal combustion engines under 3000 H.P.
- (5) Laboratory equipment used exclusively for chemical or physical analysis.
- (6) Other sources of minor significance specified by the Board.

(h) Suspension or Revocation of Permit

- (1) The Board may, after a formal hearing pursuant to Sec. 2.01 (e) (ii) of the regulations, suspend or revoke a permit for failure to comply with the terms of the permit.
- (2) Suspension or revocation of a permit to operate shall become effective upon actual receipt of the suspension or revocation of the permit by the Board by the holder of the permit.

(13.0) 2.07 Monitoring, Records, Reporting

- (a) The Board may require the owner or operator of any source to: install, use, and maintain monitoring equipment and sample the

emission in accordance with methods approved by the Board; and maintain records and make periodic emission reports as required in Sec. 2.07 (b).

- (b) Records and reports, as the Board shall prescribe, pertaining to air contaminants or fuel, shall be recorded, compiled, and submitted on forms furnished by the Board.

(9.0) 2.08 Sampling and Testing Methods

- (a) All tests shall be made and the results calculated in accordance with test procedures approved by the Board. All tests shall be made under the direction of persons qualified by training and/or experience.
- (b) The Board may test emissions of air contaminants from any source. Upon request of the Board the person responsible for the source to be tested shall provide necessary holes in stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices, as may be necessary for proper determination of the emission of air contaminants. This requirement shall be in addition to Section 2.07.

(7.0) 2.09 Reporting of Control Equipment Maintenance or Malfunction

- (a) In case of shutdown and/or bypassing of air pollution control equipment for necessary scheduled maintenance, the intent to shutdown such equipment shall be reported to the Executive Secretary or his representative and local air pollution control agency, if any, at least twenty-four (24) hours prior to the planned shutdown. Such prior notice shall include, but is not limited to, the following:
 - (1) Identification of the specific facility to be taken out of service as well as its location and permit and/or registration number.
 - (2) The expected length of time that the air pollution control equipment will be out of service.
 - (3) The nature and quantity of emissions of air contaminants likely to occur during the shutdown period.
 - (4) Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage of the air pollution control equipment.
- (b) In the event that any emission source air pollution control equipment, or related facility, fails in a manner that may cause an increase in the emission of air contaminants in violation of

applicable regulations of the Board the person responsible for such equipment shall immediately notify the Executive Secretary or his representative by telephone of such failure or breakdown and provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. When the condition causing the failure or breakdown has been corrected and the equipment is again in operation, the Executive Secretary or his representative shall be notified.

- (c) Nothing in the Section 2.09 (a) and (b) shall be construed as giving an owner the right to temporarily increase the emission of contaminants or to use as a means of circumventing the emission standards otherwise provided in these regulations.

(2.0) 2.10 Circumvention

No owner shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which would otherwise violate these regulations (this section does not prohibit the construction of a stack or chimney).

(2.0) 2.11 Severability

If any provision of these regulations or the application thereof to any person or circumstances is held to be invalid, such invalidity shall not affect other provisions or application of any other part of these regulations which can be given effect without the invalid provisions of application, and to this end the provisions of these regulations and the various applications thereof are declared to be severable.

SECTION III

(4.0) 3.00 AIR QUALITY STANDARDS

(2.0) 3.01 General Provisions

- (a) Air quality standards are required to assure that ambient concentrations of air contaminants are consistent with established criteria and shall serve as the basis for effective and reasonable management of the air resources of the Commonwealth of Virginia.
- (b) At such time as additional pertinent information becomes available with respect to applicable air quality criteria, such information shall be considered and the air quality standards revised accordingly.
- (c) The absence of a specific air quality standard shall not preclude action by the Board to control contaminants to assure protection, safety, welfare, and comfort of the people of the Commonwealth of Virginia.
- (d) The air quality standards established herein shall apply to all areas outside a source property line.
- (e) Where applicable, all measurements of air quality shall be corrected to a reference temperature of 70° F and to a reference pressure of 14.7 pounds per square inch absolute.

(4.1) 3.02 Particulate Matter.

- (a) Primary air quality standards are
 - (1) 75 micrograms per cubic meter - annual geometric mean.
 - (2) 260 micrograms per cubic meter - maximum 24 hr. concentration not to be exceeded more than once per year.
- (b) Secondary air quality standards are
 - (1) 60 micrograms per cubic meter - annual geometric mean.
 - (2) 150 micrograms per cubic meter - maximum 24 hr. concentration not to be exceeded more than once per year.
- (c) Particulate matter shall be determined by the high volume method as described in Appendix B, Part 410, Chapter IV, Title 42, Code of Federal Regulations, or by an equivalent method.

(4.2) 3.03 Sulfur Oxides (Sulfur Dioxide)

(a) Primary air quality standards are

- (1) 80 micrograms per cubic meter (0.03 ppm) - annual arithmetic mean.
- (2) 365 micrograms per cubic meter (0.14 ppm) - maximum 24 hr. concentration not to be exceeded more than once per year.

(b) Secondary air quality standards are

- (1) 60 micrograms per cubic meter (0.02 ppm) - annual arithmetic mean.
- (2) 260 micrograms per cubic meter (0.10 ppm) - maximum 24 hr. concentration not to be exceeded more than once per year.
- (3) 1,300 micrograms per cubic meter (0.50 ppm) - maximum 3 hr. concentration not to be exceeded more than once per year.

(c) Sulfur dioxide shall be measured by the pararosaniline method as described in Appendix A, Part 410, Chapter IV, Title 42, Code of Federal Regulations or by an equivalent method.

(4.5) 3.04 Carbon Monoxide.

(a) Primary and secondary air quality standards are

- (1) 10 milligrams per cubic meter (9ppm) - maximum 8 hr. concentration not to be exceeded more than once per year.
- (2) 40 milligrams per cubic meter (35 ppm) - maximum 1 hr. concentration not to be exceeded more than once per year.

(b) Carbon monoxide shall be measured by the nondispersive infrared spectrometry method, as described in Appendix C, Part 410, Chapter IV, Title 42, Code of Federal Regulations, or by an equivalent method.

(4.6) 3.05 Photochemical Oxidants.

- (a) Primary and secondary air quality standard is 160 micrograms per cubic meter (0.08 ppm) - maximum 1 hr. concentration not to be exceeded more than once per year.
- (b) Photochemical oxidants shall be measured and corrected for interferences due to nitrogen oxides and sulfur dioxide by the method described in Appendix D, Part 410, Chapter IV, Title 42, Code of Federal Regulations, or by an equivalent method.

(4.4) 3.06 Hydrocarbons.

- (a) Primary and secondary air quality standard for hydrocarbons is 160 micrograms per cubic meter (0.24 ppm) - maximum 3 hr. concentration (6-9 AM) not to be exceeded more than once per year.
- (b) Hydrocarbons shall be measured and corrected for methane by the method described in Appendix E, Part 410, Chapter IV, Title 42, Code of Federal Regulations, or by an equivalent method.
- (c) The hydrocarbon air quality standard is for use as a guide in determining hydrocarbon emission control required to achieve the photochemical oxidant standard.

(4.3) 3.07 Nitrogen Dioxide.

- (a) Primary and secondary air quality standard is 100 micrograms per cubic meter (0.05 ppm) - annual arithmetic mean.
- (b) Nitrogen dioxide shall be measured by the method described in Appendix F, Part 410, Chapter IV, Title 42, Code of Federal Regulations, or by an equivalent method.

(4.1) 3.08 Dustfall.

Geometric mean of monthly values for four consecutive months at any one location shall not exceed 15 tons per square mile per month (metric equivalent: 0.525 milligrams per square centimeter per month or 5.25 grams per square meter per month) including background concentration.

SECTION IV
(Rule 1)

(51.13) 4.01.00 OPEN BURNING

(51.13) 4.01.01 Prohibition of Open Burning.

- (a) No owner shall cause, suffer, allow or permit open burning of refuse except as provided in paragraph 4.01.02; however, such exceptions shall not allow the burning of rubber tires, asphaltic materials, crankcase oil, impregnated wood, or similar materials which produce dense smoke nor shall such exceptions permit any owner to conduct salvage operations by open burning.
- (b) Open burning under the exceptions of paragraph 4.01.02 does not exempt or excuse a person from the consequences, damages or injuries which may result from such complying with all applicable laws, ordinances, regulations, and orders of the governmental entities having jurisdiction, even though the open burning is conducted in compliance with paragraph 4.01.02.
- (c) All open burning permitted under paragraph 4.01.02, Exceptions, shall be immediately terminated in any region upon declaration of a step of the Air Pollution Emergency Episode as described in section VI.

(2.0) 4.01.02 Exceptions.

If no smoke or fly ash nuisance is created, open burning is permitted as follows:

- (a) In the performance of an official duty of any public health or safety officer, after notification of the Executive Secretary or his representative and local air pollution control agency, if any, if the fire is necessary to prevent or abate irregular or non-recurring hazards falling into one or more of the following situations:
 - (1) Prevention of a fire hazard which cannot be abated by other means.
 - (2) Destruction of deteriorated or unused explosives, munitions, and certain hazardous chemicals on government or designated private property, in accordance with recognized procedures.
 - (3) Protection of public health.
- (b) For training and instruction of (1) public fire fighters under the supervision of the designated fire marshal, (2) industrial

in-house fire fighting personnel with clearance from the local fire fighting authority.

- (c) In the recognized practices of forest management, after notification of the state forester or his representative or the Executive Secretary or his representative and local air pollution control agency, if any, when such burning is undertaken in compliance with the forestry practices recommended by the State Division of Forestry, Department of Conservation and Economic Development, provided the following conditions are met:
 - (1) The burning shall be done only when there is good ventilation or when the wind is away from any built-up area or primary highway.
 - (2) The location of the burning shall be no closer than the following limits: 1000 feet from any dwelling located in a predominantly residential area; and 1 mile from any military, commercial or private airfield.
 - (3) At no time shall the fire be left unattended.
- (d) In the recognized practices of agriculture, after notification of the county agent or the district forester or the Executive Secretary or his representative and local air pollution control agency, if any, provided the following conditions are met:
 - (1) The burning shall be done only when there is good ventilation or when the wind is away from any built-up area or primary highway.
 - (2) The location of the burning shall be no closer than the following limits: 1000 feet from any dwelling located in a predominantly residential area; and 1 mile from any military, commercial or private airfield.
 - (3) At no time shall the fire be left unattended.
- (e) For cooking of food, recreational purposes, and ceremonial occasions.
- (f) For operation of craft exhibits and pageants of historical significance.
- (g) For warming of construction or other workers by use of salamanders or other devices providing good combustion.
- (h) For burning of leaves, while not encouraged, in approved containers in those areas where provision for public or private collection of leaves is not available.

- (i) For burning of ordinary household trash by householders, while not encouraged, in those areas where provision for public or private collection of trash is not available provided that:
 - (1) Burning is done in an approved container.
 - (2) Dead animals and animal waste are not burned.
- (j) By a railroad company to clear its right-of-way of dead vegetation, when such burning is approved by and carried out under the direction of the Division of Forestry, Department of Conservation and Economic Development if the following conditions are met:
 - (1) When the burning is within independent cities and towns and Standard Statistical Metropolitan Areas, as determined by the U. S. Bureau of the Census, the railroad company must obtain a variance from the local air pollution control agency, if any, or the Board. A copy of each variance must be forwarded to the Executive Secretary or his representative by the railroad company before the burning is commenced.
 - (2) Other information, as required by the Board, must be submitted.
 - (3) At no time shall the fire be left unattended.
- (k) For land clearing for the construction or modification of roads and highways, parking areas, railroad tracks, pipelines, power facilities or communication lines or any other operation which can meet the requirements and is approved by the Board if the following conditions are met:
 - (1) Trunks of felled merchantable timber with a diameter greater than four (4) inches shall be cut into saw log or pulp wood lengths and disposed of by means other than open burning. Stumps to be burned must contain no more than two (2) feet of trunk.
 - (2) Burning shall be performed only when there is good ventilation or when the wind direction is away from any built-up area.
 - (3) Burning shall be performed at locations along the right-of-way, easement, or within the boundaries of the property at the greatest distance practicable from dwellings, highways, and military, commercial and private airfields.
 - (4) At no time shall the fire be left unattended.

- (5) When the burning is within independent cities and towns and Standard Statistical Metropolitan Areas, as determined by the U. S. Bureau of the Census, those responsible for the burning must obtain a variance from the local air pollution control agency, if any, or the Board. A copy of each variance must be forwarded to the Executive Secretary or his representative before the burning is commenced.
- (1) For land clearing for the development or modification of buildings or building areas if the following conditions are met:
 - (1) Trunks of felled merchantable timber with a diameter greater than four (4) inches shall be cut into saw log, pulp wood, or fire place length and disposed of by means other than open burning. Stumps to be burned must contain no more than 2 feet of tree trunk.
 - (2) The burning shall be done only when there is good ventilation or when the wind direction is away from any built-up area.
 - (3) The location of the burning shall be no closer than the following limits: 1000 feet from any dwelling located in a predominantly residential area other than a dwelling or structure located on the property on which the burning is conducted; $\frac{1}{2}$ mile from a major highway as indicated on State Highway map; and 1 mile from any military, commercial or private airfield.
 - (4) At no time shall the fire be left unattended.
 - (5) When the burning is within independent cities and towns and Standard Statistical Metropolitan Areas, as determined by the U. S. Bureau of the Census, those responsible for the burning must obtain a variance from the local air pollution control agency, if any, or the Board. A copy of each variance must be forwarded to the Executive Secretary or his representative before the burning is commenced.

(2.0) 4.01.03 Exclusion.

This rule does not apply to open burning using devices or methods specifically designed to provide good combustion performance under the following conditions:

- (a) Visible emissions shall comply with pertinent rules.
- (b) All devices or methods under this Section 4.01.03 shall be approved by the Executive Secretary or his representative and local air pollution control agency, if any, prior to installation.

SECTION IV
(Rule 2)

(50.1.2) 4.02.00 SMOKE OR OTHER VISIBLE EMISSIONS - STATIONARY SOURCES

(50.1.2) 4.02.01 Prohibition of Smoke or Other Visible Emissions

- (a) No owner shall cause, suffer, allow or permit the discharge into the outdoor atmosphere from any single point of emission from a source any air contaminant which is
- (1) Darker in shade than smoke designated as No. 1 on the Ringelmann Chart, or
 - (2) Of such opacity as to obscure an observer's view to a degree greater than does smoke designated as No. 1 on the Ringelmann Chart.
- (b) No owner shall cause, suffer, allow, or permit the discharge of dust, fumes, gases, mist, vapors, or any combination thereof to escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any regulation.

(2.0) 4.02.02 Exceptions

- (a) If it can be proven that emissions discharging from a single point of emission are in compliance with applicable regulations on particulate emissions for the specific source in question, the Board may modify the requirements of this regulation.
- (b) When starting a new fire or blowing tubes or cleaning a fire box, a person may discharge into the atmosphere from any single point of emission, emissions of a shade or density not darker than No. 3 on the Ringelmann Chart or 60 percent opacity for brief periods.
- (c) The limits of section 4.02.01 shall not apply when the opacity of the visible emission is due to the presence of uncombined water.

(2.0) 4.02.03 Traffic Hazard

No person shall discharge from any source whatsoever such quantities of air contaminants, uncombined water, or other materials which may cause a traffic hazard.

SECTION IV
(Rule 3)

(51.5) 4.03.00 PARTICULATE EMISSION FROM EXISTING FUEL BURNING EQUIPMENT

(51.5) 4.03.01 Emission Standards for Furnaces

(a) No owner shall allow to be emitted into the outdoor atmosphere from any fuel burning equipment or to pass a convenient measuring point near the stack outlet, particulate matter in the flue gases to exceed the appropriate following standard:

- (1) For operations with total heat input less than twenty-five million (25×10^6) BTU per hour, the maximum allowable emission shall be 0.4 pounds of particulate per million BTU input.
- (2) For operations with total heat input between twenty-five million (25×10^6) and ten billion ($10,000 \times 10^6$) BTU per hour, the maximum allowable emission, in pounds per million BTU input, E , shall be determined by the following equation: $E = 0.8425 H^{-0.2314}$, where H is the total heat in millions of BTU per hour.
- (3) For operations with total heat input in excess of ten billion ($10,000 \times 10^6$) BTU per hour, the maximum allowable emission shall be 0.10 pounds of particulate per million BTU input.
- (4) Figure 4.3.1 illustrates the above emission standards.

(b) For purposes of this regulation, the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or stacks. The heat input value used shall be the equipment manufacturer's or designer's guarantee maximum input, or maximum continuous heat input, or maximum continuous heat input determined by test, whichever is greater. The total heat input of all fuel burning units at a plant or on a premise normally operated simultaneously shall be used for determining the maximum allowable amount of particulate matter which may be emitted.

(9.0) 4.03.02 Emission Testing

Emission tests relating to this rule apply to recognized ASME methods. The approved methods are the ASME Test Code for Dust Separating Apparatus (PTC-21-1941) and the ASME Test Code for Determining Concentrations in Gas Streams (PTC-27-1957). Procedures may be adjusted or changed by the Executive Director to suit specific sampling conditions or needs based upon

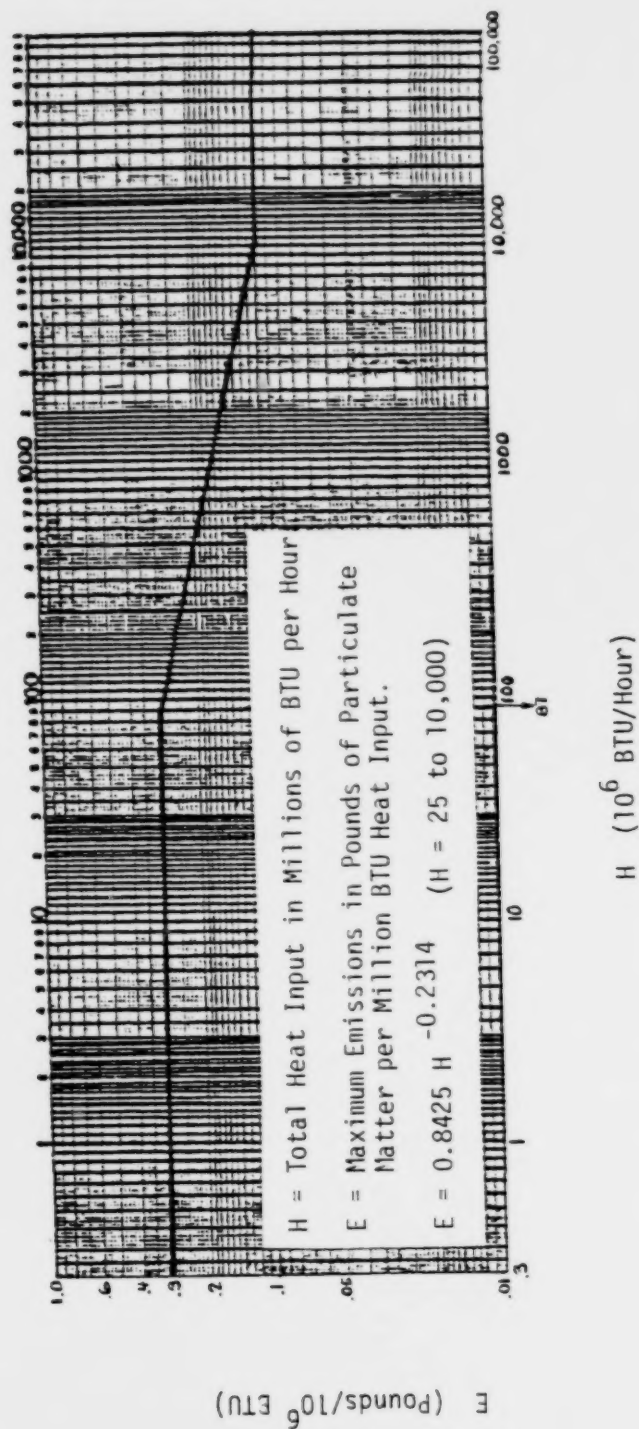
good practice, judgement and experience. When such tests are adjusted, consideration shall be given to the effect of such change on established emission standards.

(2.0) 4.03.03 Exemptions

All fuel burning equipment using solid fuel for space and domestic water heating with a BTU input of less than 350,000 BTU per hour shall be exempt from this rule.

All fuel burning equipment using gas or oil for space and domestic water heating with a BTU input of less than 1,000,000 BTU per hour shall be exempt from this rule.

FIGURE 4.3.1
ALLOWABLE PARTICULATE EMISSIONS FROM FUEL BURNING EQUIPMENT



SECTION IV
(Rule 4)

(50.1.1) 4.04.00 PARTICULATE MATTER

(50.1.1) 4.04.01 Restriction of Emission of Particulate Matter from Manufacturing Operation

(a) General Provisions

- (1) Unless covered by a specific regulation for a particular process in a subsequent section of this Rule no person shall cause, suffer, allow or permit the emission of particulate matter in any one hour from any process unit in excess of the amount shown in Table 4.4.1 for the process weight rate allocated to such process unit.
- (2) Emission tests relating to this rule shall be made by generally recognized standards or methods of measurement. Methods can be found in the ASME Test Code for Dust Separating Apparatus (PTU-21-1941) and the ASME Test Code for Determining Concentrations in Gas Streams (PTC-27-1957) but these may be adjusted or changed by the Board to suit specific sampling conditions or needs based upon good practice, judgment and experience. When such tests are adjusted, consideration shall be given to the effect of such change on established emission standards.
- (3) Interpolation of the data in Table 4.4.1 for process weight rates up to 60,000 lb/hr shall be accomplished by use of the equation $E = 4.10 p^{0.67}$, and interpolation and extrapolation of the data for process weight rates in excess of 60,000 lb/hr shall be accomplished by use of the equation $E = 55.0 p^{0.11} - 40$, where E = rate of emission in lb/hr and P = process weight rate in tons/hr.
- (4) Process weight per hour is the total weight of all materials introduced into any specific process unit that may cause any discharge of particulate matter. Solid fuels charged will be considered as part of the process weight, but liquid and gaseous fuels and combustion air will not. For a cyclical or batch operation, the process weight per hour will be derived by dividing the total process weight by the number of hours in one complete operation from the beginning of any given process to the completion thereof, excluding any time during which the equipment is not in service. For continuous operations, the process weight per hour will be derived by dividing the process weight for a typical period of time.

- (5) Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpretation of this regulation, the interpretation that results in the minimum value for allowable emission shall apply.
 - (6) For purposes of this regulation, the total process weight for each individual process unit at a plant or premises shall be used for determining the maximum allowable emission of particulate matter that passes through a stack or stacks.
 - (7) This rule does not apply to fuel burning equipment, as defined in Section I.
- (b) Particulate Emission Standards, Specific Industries
- (1) Particulate Emission Standards for Petroleum Refining - Catalytic Cracking Units - no person shall cause, suffer, allow or permit particulate emissions from existing petroleum catalytic cracking units in excess of 0.05 per cent of the rate of catalyst recirculation within the unit.
 - (2) Particulate Emission Standards for Hot Mix Asphalt Plants - No person shall cause, suffer, allow or permit particulate matter resulting from the operation of a hot mix asphalt plant to be discharged into the atmosphere in excess of the rates set forth in the following table:

Aggregate Process Rate Tons/Hour	Maximum Allowable Emission of <u>Particulate Matter</u> in Lbs./Hour
5	10
10	16
15	22
20	28
25	31
50	33
100	37
150	40
200	43
250	47
300 and above	50

Linear interpolation shall be used for rates between any two consecutive rates stated in the preceding table.

TABLE 4.4.1

PROCESS WEIGHT RATE		MAXIMUM
Lb/Hr.	Tons/Hr.	ALLOWABLE EMISSION RATE
		Lb/Hr.
100	0.05	0.551
200	0.10	0.877
400	0.20	1.40
600	0.30	1.83
800	0.40	2.22
1000	0.50	2.58
1500	0.75	3.38
2000	1.00	4.10
2500	1.25	4.76
3000	1.50	5.38
3500	1.75	5.96
4000	2.00	6.52
5000	2.50	7.58
6000	3.00	8.56
7000	3.50	9.49
8000	4.00	10.4
9000	4.50	11.2
10000	5.00	12.0
12000	6.00	13.6
16000	8.00	16.5
18000	9.00	17.9
20000	10.00	19.2
30000	15.00	25.2
40000	20.00	30.5
50000	25.00	35.4
60000	30.00	40.0
70000	35.00	41.3
80000	40.00	42.5
90000	45.00	43.6
100000	50.00	44.6
120000	60.00	46.3
140000	70.00	47.8
160000	80.00	49.1
200000	100.00	51.3
1000000	500.00	69.0
2000000	1000.00	77.6
6000000	3000.00	92.7

All such airborne particulate matter emanating from the yards, sidings or roads of such operations shall be controlled as stipulated in Paragraph 4.04.02.

- (3) Particulate Emission Standard for Chemical Fertilizer Manufacturing Plants - No person shall cause, suffer, allow, or permit particulate matter caused by chemical fertilizer manufacturing operations, which utilize recycle and physically connected dissimilar processes as a part of the manufacturing operation to be discharged from any stack or outlet into the atmosphere in excess of the rates shown in the following table:

TABLE 4.4.2

<u>Process Weight Rate</u> Tons/Hr. (*)	<u>Rate of Emission</u> Lb/Hr.
15	19.2
30	30.5
60	42.5
90	46.3
120	49.0
150	51.2
180	53.1

* The process weight rate entry to be used in the above table for chemical fertilizer manufacturing processes shall be considered as the production rate, or for chemical fertilizer operations involving physically connected dissimilar processes shall be the sum of the process weight rates of each of the dissimilar processes. The materials handling and screening equipment shall not be considered processes for the determination of process weight rate. For a process weight rate between any two consecutive rates stated in the preceding table, maximum allowable emissions of particulate matter may be calculated by the following formula:

For process weight rates up to 45 tons per hour -

$$E = 4.10 \left(\frac{2P}{3} \right)^{0.67}$$

or for process weight rates over 45 tons per hour -

$$E = 55.0 \left(\frac{2P}{3} \right)^{0.11-40}$$

Where E = Emission Rate in Lb/Hr. and P = Process Rate in Tons/Hr.

When one manufacturing operation, or combination of physically connected processes, is vented through separate stacks, the allowable stack emission rate for each stack shall be such that the sum of the emission rates for all of the stacks from that operation is equal to the allowable rates from that operation vented through a single stack. For purpose of emission testing, samples taken of separate stacks within a three-day period, on the same fertilizer grade, would be considered as simultaneous for the purpose of determining total operation emissions.

- (4) Particulate Emission Standard for Pulp and Paper Mills - No person shall cause, suffer, allow or permit particulate matter resulting from the production of pulp and paper to be discharged from stacks or chimneys into the atmosphere in excess of the following:

Maximum Allowable Emission of
Particulate in Lbs./Equivalent
Ton of Air Dried Pulp

All Recovery Furnace Stacks	3.0
All Dissolving Tank Vents	0.75
All Lime Kiln Stacks	1.0
All Slaker Tank Vents	0.3

- (5) Particulate Emission Standards for Production and Handling of Materials in Sand, Gravel and Crushed Stone Operations - No person shall cause, suffer, allow or permit particulate emissions from the production and handling of materials in sand, gravel and crushed stone operations in excess of Table 4.4.1.

Where it is practical to measure the emissions, the emission shall not exceed the limits established by Table 4.4.1. All such airborne particulate matter emanating from the yards, sidings or roads of such operations shall be considered fugitive dust, and shall be controlled as stipulated in Paragraph 4.04.02. All crushers shall be fitted with liquid sprays or other appropriate systems which effectively limits the escape of airborne dust. Vibrating and shaker screens handling dry materials shall be enclosed or fitted with a collector system capable of releasing less than 0.05 grains per standard cubic foot. All feeders, elevators, conveyors, transfer points, discharge points and loading points shall be equipped with collectors, sprays or other means when necessary to minimize the escape of dust.

- (6) Particulate Emission Standard for Coal Thermal Drying Operations of a Coal Preparation Plant - No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any thermal drier exhaust in excess of the following limitations:

<u>Process Wts.</u> <u>Tons/Hr.</u>	<u>Maximum Allowable</u> <u>Emission of Particulate</u> <u>Matter in Lbs./Hr.</u>
100 or less	45
200 or above	105

For any process rate between the two process rates stated in the above table, limitations shall be as determined by linear interpolation.

Any stack venting thermal drier exhaust gases into the open air shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures.

- (7) Particulate Emission Standards for an Air Table Operation of a Coal Preparation Plant - No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any air table exhaust in excess of 0.05 grains per standard cubic foot of exhaust gases. In no event shall the emission rate exceed the appropriate limit of Table 4.4.1. No person shall circumvent this Regulation by adding additional gas to any table or group of air exhausts for the purpose of reducing the grain loading. Any stack venting air table exhaust gases into the open air shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures.
- (8) Particulate Emission Standards for Portland Cement Plants - No person shall cause, suffer, allow or permit the particulate emissions from cement plants to exceed the emission limits contained in Table 4.4.1 of this rule.
- (9) Particulate Emission for Plants Engaged in the Manufacturing of Wood Products - No person shall cause, suffer, allow or permit particulate matter, caused by the working or sanding of wood, to be discharged from any stack, vent or building into the atmosphere without providing, as a minimum for its collection, adequate duct work and properly designed collectors, or such other devices as approved by the Board. Particulate emissions shall conform to Table 4.4.1. If process loading rate cannot be calculated, the grain loading shall not exceed 0.05 grains per standard cubic foot of exhaust gas.
- (10) Particulate Emission Standard from Secondary Metal Operations - No person shall cause, suffer, allow or permit par-

particulate emissions from secondary metal operations as listed in Appendix A into the open air in excess of the quantity as listed in Table 4.4.3.

TABLE 4.4.3

ALLOWABLE MASS EMISSION RATE
FROM EXISTING SECONDARY METAL OPERATIONS

<u>Process Weight Rate</u> (lb./hr.)	<u>Stack Emission Rate</u> (lb./hr.)
1,000 or less	3.05
2,000	4.70
3,000	6.35
4,000	8.00
5,000	9.05
6,000	11.30
7,000	12.90
8,000	14.30
9,000	15.50
10,000	16.65
12,000	18.70
16,000	21.60
18,000	22.80
20,000	24.00
30,000	30.00
40,000	36.00
50,000 or more	42.00

For a process weight between any two consecutive process weights stated in this table, the emission limitation shall be determined by linear interpolation.

The permissible emission rates as shown in the table shall apply during the melt time but shall not apply during the time of preheat or preparing for shutdown. The exemption for preheating and shutdown shall be limited to two twenty minute periods in a given eight-hour period for each furnace unit for existing equipment.

- (11) Particulate Emission Standard for Light Weight Aggregate Industry - No person shall cause, suffer, allow or permit the particulate emissions from light weight aggregate plants to exceed the emission limits in Table 4.4.4.

TABLE 4.4.4

ALLOWABLE MASS EMISSION RATE
FROM EXISTING LIGHT WEIGHT AGGREGATE PLANTS

<u>Process Weight Rate</u> (Tons/Hr.)	<u>Emission Rate</u> (Lb./Hr.)	<u>Process Weight Rate</u> (Tons/Hr.)	<u>Emission Rate</u> (Lb./Hr.)
.05	.176	4.0	14.0
.10	.351	6.0	21.1
.20	.702	8.0	28.1
.30	1.053	10.0	35.1
.40	1.404	15	52.7
.50	1.76	20	70.2
.75	2.64	25	87.8
1.0	3.51	30	105
1.25	4.38	35	123
1.50	5.27	40	140
1.75	6.15	45	158
2.0	7.02	50	176

For a process weight rate between any two consecutive rates in the above table or for rates over 50 tons per hour, the maximum allowable emission of particulate matter may be calculated by the following formula

$$E = 3.51P$$

Where E = Emission Rate in lb./hr. and P = Process Weight Rate in tons/hr.

(12) Particulate Emission Standard for Feed Manufacturing Operations - No person shall cause, suffer, allow or permit the particulate emissions from Feed Manufacturing plants to exceed the emission limits in Table 4.4.1.

(i) The process weight rate entry to be used in the Table 4.4.1 for Feed Manufacturing process units shall be considered as the production rate.

(ii) The process weight rate entry to be used in Table 4.4.1 for Feed Manufacturing Operations involving physically connected dissimilar processes shall be the sum of the process weight rates of each of the dissimilar processes. The materials handling equipment shall not be considered processes for determination of process rate.

(c) Toxic Materials. (Reserve for future Emission Standards.)

(d) Corrosive Materials. (Reserve for future Emission Standards.)

(50.1) 4.04.02 Control of Fugitive Dust

No person shall cause, suffer, allow or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to the following:

- (a) Use, where possible, water or chemicals for control dust in the demolition of existing building or structures, construction operations, the grading of roads, or the clearing of land;
- (b) Application of asphalt, oil, water or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can create airborne dusts;
- (c) Installation and use of hoods, fans and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar methods.
- (d) Open equipment for conveying or transporting materials likely to become airborne which would create objectionable air pollution shall be covered, or treated in an equally effective manner at all times when in motion.
- (e) The paving of roadways and their maintenance in a clean condition.
- (f) The prompt removal of earth or other material from paved streets which earth or other material has been transported thereto by trucking or earth moving equipment or erosion by water.

SECTION IV
(Rule 5)

(50.0) 4.05.00 GASEOUS CONTAMINANTS

(50.0) 4.05.01 Prohibition of Gaseous Contaminant Emissions.

No owner shall allow the operation of combustion installation and process equipment so as to disperse into the outdoor atmosphere gaseous contaminant emissions in such quantities or concentrations as to injure human, plant or animal life, or cause a condition of air pollution.

(50.2) 4.05.02 Sulfur Containing Gases and Compounds.

No person shall cause, suffer, allow or permit the emission from any source operation an in-stack sulfur dioxide concentration exceeding 2000 ppm by volume except as provided in the following:

(a) Control of the Emission of Sulfur Dioxide From Combustion Installations.

- (1) No person shall cause, suffer, allow, or permit sulfur dioxide caused by the combustion of fuel to be discharged from all combustion installations at a given location in excess of the quantity shown on Graph 4.5.1 Curve A. In those regions, districts, or locations where attainment of the ambient air quality standards is required, the Board may require emission performance in accordance with Graph 4.5.1 Curve B and/or Curve C.

(b) Ocean Going Vessels.

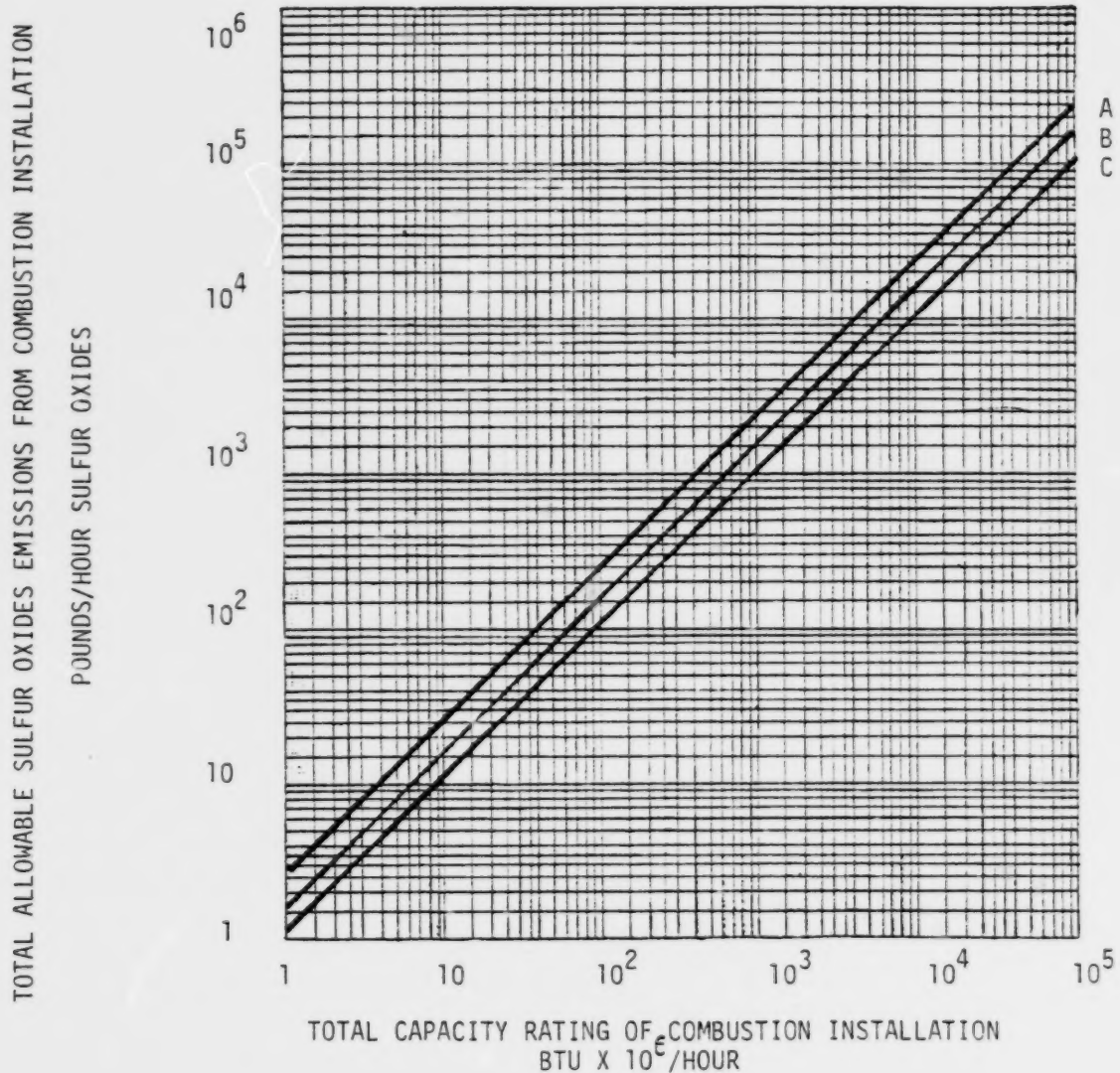
- (2) (Reserve for future regulations.)

(c) Sulfuric Acid Plants

- (1) The sulfur dioxide in the tail gases from any existing sulfuric acid manufacturing operation shall not exceed a concentration of 2000 parts per million by volume and a mass emission rate of 27 pounds per ton of 100% acid produced when elemental sulfur is used for feed material, or 3500 ppm by volume and a mass emission rate of 45 pounds per ton of 100% acid produced when other raw materials such as recycled spent acid and ores are used as feed. These emission levels may be exceeded for a period not longer than 24 hours during start-up.
- (2) All plants must reduce acid mist emissions to not more than 5.0 mg. H₂SO₄ including uncombined SO₃ per standard cubic foot.

Graph 4.5.1

ALLOWABLE SULFUR OXIDES EMISSIONS
FROM COMBUSTION INSTALLATION



CURVES BASED ON THE FOLLOWING EQUATIONS:

- (A) $S = 2.64 K$
- (B) $S = 1.58 K$
- (C) $S = 1.06 K$

WHERE:

S = Allowable emissions of sulfur oxides in pounds/hour.
 K = Total capacity rating of combustion installation in BTU x 10^6 /hour.

(d) Hydrogen Sulfide

No person shall cause or permit the continuing emission of any refinery process gas stream or any other process gas stream that contains H₂S in concentration greater than 15 grains per 100 cubic feet of gas without burning or removing H₂S in excess of this concentration provided that SO₂ emissions in burning operation meet the requirements of Paragraph 4.05.02.

(e) Sulfur Recovery Operation

The sulfur dioxide in the tail gases from existing sulfur recovery operations shall not exceed a concentration of 8000 parts per million by volume and shall not exceed a mass emission rate as specified in Table 4.5.1.

TABLE 4.5.1

ALLOWABLE MASS EMISSION RATE OF SULFUR DIOXIDE
FOR SULFUR RECOVERY OPERATIONS

Sulfur Production Rate (tons / day)	SO ₂ Mass Emission Rate (lbs. / hr.)
50	415
100	830
200	1660
300	2490
400	3320
500	4150

(f) Kraft Pulp Mill Total Reduced Sulfur Emissions

(1) All existing Kraft pulp mills shall submit to the Board a control program including detailed methods to reduce total reduced sulfur emissions using the best practicable technology for control of the total reduced sulfur emissions from recovery furnaces, lime kilns, digestors and multiple effect evaporators. The daily average value per quarter shall not exceed 1.2 pounds of total reduced sulfur as H₂S per ton of equivalent air dry pulp from the above sources.

(2) Semi-Chemical Pulp Mills

(a) (Reserve for future inclusion)

(g) Lightweight Aggregate

No person shall cause, suffer, allow or permit sulfur dioxide caused by the kilning in light weight aggregate in excess of the quantity shown on Graph 4.5.1 Curve A.

(h) Non-Ferrous Smelter

No person shall cause or permit emissions of sulfur oxides from primary non-ferrous smelters to exceed that set forth according to the following equations.

Copper Smelters : $Y = 0.2X$

Zinc Smelters : $Y = 0.564X^{0.85}$

Lead Smelters : $Y = 0.98X^{0.77}$

Where X is the total sulfur fed to the smelter in Lb/hr and Y is the allowable sulfur emissions in lb/hr. Note: This rule in effect, requires removal of about 90 percent of the input-sulfur to the smelter.

(50.4) 4.05.03 Control of Hydrocarbon Emissions From Stationary Sources

(a) General Provision

The application of this section shall apply only to those areas or locations where the photo-chemical oxidant levels are designated by the board as being excessive because of health effects or other reasons.

(b) Storage of Volatile Organic Compounds

No person shall place, store, or hold in any stationary tank reservoir or other container of more than 65,000 gallons capacity any volatile organic compounds unless such tank, reservoir, or other container is a pressure tank capable of maintaining working pressures sufficient at all times to prevent vapor or gas loss to the atmosphere or is designed, and equipped with one of the following vapor loss control devices:

- (1) A floating roof, consisting of a pontoon type, double deck type roof or internal floating cover, which will rest on the surface of the liquid contents and be equipped with a closure seal or seals to close the space between the roof edge and tank wall. This control equipment shall not be permitted if the volatile organic compounds have a vapor pressure of 17.0 pounds per square inch absolute or greater at 100°F or 15 pounds Reid vapor pressure, whichever is limiting.

All tank gauging or sampling devices shall be gas-tight except when tank gauging or sampling is taking place.

- (2) A vapor recovery system, consisting of a vapor gathering system capable of collecting the volatile organic compound vapors and gases discharged and a vapor disposal system capable of processing such volatile organic vapors and gases so as to prevent their emission to the atmosphere and with all tank gauging and sampling devices gas-tight except when gauging or sampling is taking place.
- (3) Other equipment or means of equal efficiency for purpose of air pollution control as may be approved by the Board.
- (4) No person shall place, store, or hold in any stationary storage vessel of more than 250 gallons capacity any volatile organic compound unless such vessel is equipped to be filled through a submerged fill pipe or is a pressure tank as described in paragraph 4.05.03(b)(1) or is fitted with a vapor recovery system as described in Section 4.05.03(b)(2).

(c) Volatile Organic Compounds Loading Facilities

- (1) No person shall load any volatile organic compounds into any tank truck or trailer from any loading facility handling more than 50,000 gallons per day unless such loading facility is equipped with a vapor collection and disposal system, or use of a filling procedure of equal or better emission control efficiency, or their equivalent, properly installed, in good working order, and in operation.
- (2) No person shall load any volatile organic compounds into any tank truck, or trailer from any loading facility handling more than 50,000 gallons per day of such compounds, unless such loading facility is equipped as set forth in 4.05.03(c)(1). If a vapor collection and disposal system is utilized, the loading arm shall be equipped with a vapor collection adaptor, pneumatic, hydraulic, or other mechanical means which will provide a vapor tight seal between the adaptor and the hatch. A means shall be provided to prevent liquid organic compounds drainage from the loading device when it is removed from the hatch of any tank truck or trailer. When loading is effected through means other than the hatches, all loading lines shall be equipped with fittings which make vapor-tight connections and which close automatically when disconnected.

(d) Volatile Organic Compound Water Separation

No person shall use any compartment of any single or multiple compartment equipment designed to separate water from only

volatile organic compounds which compartment received effluent water containing 200 gallons a day or more of volatile organic compound from any equipment processing, refining, treating, storing, or handling volatile organic compounds unless such compartment is equipped with one of the following vapor loss control devices, properly installed, in good working order, and in operation:

- (1) A container having all openings sealed and totally enclosing the liquid contents. All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
- (2) A container equipped with a floating roof, consisting of a pontoon type, double deck type roof, or internal floating cover, which will rest on the surface of the contents and be equipped with a closure seal or seals to close the space between the roof edge and container wall. All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
- (3) A container equipped with a vapor recovery system consisting of a vapor gathering system capable of collecting the hydrocarbon vapors and gases discharged and a vapor disposal system capable of processing such hydrocarbon vapors and gases so as to prevent their emission to the atmosphere and with all container gauging and sampling devices gas-tight except when gauging or sampling is taking place.
- (4) A container having other equipment of equal efficiency for purposes of air pollution control as may be approved by the Board.

(e) Pumps and Compressors

All pumps and compressors handling volatile organic compounds shall have mechanical seals or other equipment of equal efficiency for purposes of air pollution control as may be approved by the Board.

(f) Waste Gas Disposal

- (1) No person shall emit a waste gas stream from any plant producing ethylene for chemical feed stock or utilizing ethylene as a raw material into the atmosphere in excess of 40 pounds per day unless the waste gas stream is properly burned at 1300° for 0.3 seconds or greater in a direct-flame afterburner or removed by other methods of comparable efficiency.

- (2) No person shall continuously emit hydrocarbon gases to the atmosphere from a vapor blowdown system unless these gases are burned by smokeless flares, or an equally effective control device as approved by the Board. This rule is not intended to apply to accidental, emergency, or other infrequent emissions of hydrocarbons, needed for safe operation of equipment and processes.

(g) Organic Solvents

- (1) A person shall not discharge more than 15 pounds of organic materials to the atmosphere in any one day from any article, machine, equipment or other contrivance in which any organic solvent or any material containing organic solvent comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen unless such a discharge represents an overall reduction of 85% or greater.
- (2) A person shall not discharge more than 40 pounds of organic material into the atmosphere in any one day from any article, machine, equipment, or other contrivance used under conditions other than described in paragraph 4.05.03 (g) (1), for employing, applying, evaporating, or drying and photochemically reactive solvent, as defined in paragraph 4.05.03 (g) (11), or material containing such solvent, unless all organic materials discharged from such article, machine, equipment or other contrivance have been reduced by at least 85% overall. The limitations prescribed in this paragraph shall not apply to any complying industrial surface coating, which means any paint, lacquer, varnish, ink, adhesive or other surface coating material which emits to the atmosphere organic compounds which are not photochemically reactive as defined in Section 4.05.03 (g) (11). In determining percentages for water-based paints, the quantity of water shall be in the calculation of percentage.
- (3) Any series of articles, machines, equipment or other contrivances designed for processing a continuously moving sheet, web, strip, or wire which is subjected to any combination of operations described in paragraph 4.05.03 (g) (1) or 4.05.03 (g) (2) involving any photochemically reactive solvent, as defined in paragraph 4.05.03 (g) (11) or material containing such solvent, shall be subject to compliance with paragraph 4.05.03 (g) (2). Where only non-photochemically reactive solvents are employed or applied, and where any portion or portions of said series of articles, machines, equipment, or other contrivances involves operations described in paragraph 4.05.03 (g) (1) said portions shall be collectively subject to compliance with paragraph 4.05.03 (g) (1).

- (4) Emissions of organic materials to the atmosphere from the clean-up with photochemically reactive solvents, as defined in paragraph 4.05.03 (g) (11), article, machine, equipment or other contrivances described in paragraph 4.05.03 (g) (1), 4.05.03 (g) (2), or 4.05.03 (g) (3), shall be included with the other emissions of organic materials from that article, machine, equipment or other contrivance for determining compliance with these regulations.
- (5) Emissions of organic materials to the atmosphere as a result of spontaneously continuing drying of products for the first 12 hours after their removal from any article, machine, equipment, or other contrivance described in paragraphs 4.05.03 (g) (1), 4.05.03 (g) (2), or 4.05.03 (g) (3), shall be included with other emissions of organic materials from that article, machine, equipment, or other contrivance, for determining compliance with this rule.
- (6) Emissions of organic materials into the atmosphere required to be controlled by paragraph 4.05.03 (g) (1), 4.05.03 (g) (2), or 4.05.03 (g) (3) shall be reduced by:
 - (a) Incineration, provided that 90 percent or more of the carbon in the organic material being incinerated is oxidized to carbon dioxide, or
 - (b) Absorption, or
 - (c) Processing in a manner determined by the Board to be not less effective than (a) or (b) above.
- (7) A person incinerating, absorbing, or otherwise processing organic materials pursuant to this rule shall provide, properly install, and maintain in calibration, in good working order and in operation, devices as specified in the permit to construct or the control program to operate, or as specified by the Board, for indicating temperatures, pressures, rates of flow, or other operating conditions necessary to determine the degree and effectiveness of air pollution control.
- (8) Any person using organic solvents or any materials containing organic solvents shall supply the Executive Secretary or his representative upon request and in the manner and form prescribed by him, written evidence of the chemical composition, physical properties, and amount consumed for each organic solvent used.
- (9) The provisions of this rule shall not apply to:

- (a) The manufacture of organic solvents, or the transport or storage of organic solvents or materials containing organic solvents.
- (b) The use of equipment for which other requirements are specified by 4.05.03 (a), 4.05.03 (b), or 4.05.03 (c) or which are exempt from air pollution control requirements by said rules.
- (c) The spraying or application with other equipment of insecticides, pesticides, or herbicides.
- (d) The employment, application, evaporation, or drying of saturated halogenated hydrocarbons, or organic compounds in which all olefinic groups contain 3 or more halogen atoms.
- (e) Development or research laboratory operation involving the use of photochemically reactive solvents.
- (f) The use of any material, in any article, machine, equipment or other contrivance described in 4.05.03 (g) (1), 4.05.03 (g)(2), 4.05.03 (g)(3), or 4.05.03 (g)(4) if:
 - (i) the volatile content of such material consists only of water and organic solvents, and
 - (ii) the organic solvents comprise not more than 20 percent of said volatile content, and
 - (iii) the volatile content is not photochemically reactive as defined in 4.05.03 (g)(11).
- (10) For the purpose of this rule, organic solvents include diluents and thinners and are defined as organic materials which are liquids at standard conditions and which are used as dissolvers, viscosity reducers, or cleaning agents.
- (11) For the purpose of this rule, a photochemically reactive solvent is any solvent with an aggregate of more than 20 percent of its total volume composed of chemical compounds classified below or which exceeds any of the following individual percentage composition limitations, referred to the total volume of solvent:
 - (a) A combination of hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones having an olefinic or cycloolefinic type of unsaturation: 5 percent,
 - (b) A combination of aromatic hydrocarbons: 20 percent.

- (12) For the purpose of this rule, organic materials are defined as chemical compounds of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, metallic carbonates, and ammonium carbonate.

(h) Architectural Coatings

- (1) A person shall not sell or offer for sale in containers exceeding one gallon capacity, any architectural coating containing photochemically reactive solvent, as defined in 4.05.03 (g)(11).
- (2) A person shall not employ, apply, evaporate, or dry any architectural coating, purchased in containers exceeding one gallon capacity, containing photochemically reactive solvent, as defined in 4.05.03 (g)(11).
- (3) A person shall not thin or dilute any architectural coating with a photochemically reactive solvent, as defined in 4.05.03 (g)(11).
- (4) For the purpose of this rule, an architectural coating is defined as a coating used for residential, commercial buildings and their appurtenances, or industrial buildings.

(i) Disposal and Evaporation of Solvents

- (1) A person shall not, during any one day, dispose of a total of more than 1½ gallons of any such photochemically reactive solvent by any means which will permit the evaporation of such solvent into the atmosphere.

(50.5) 4.05.04 Control of Carbon Monoxide Emissions

(a) General Provision

The application of this section shall apply only to those areas of locations where carbon monoxide levels are designated by the Board to have adverse health or other effects.

- (b) No person shall emit carbon monoxide waste gas stream from any catalyst regeneration of a petroleum cracking system, petroleum coker, or other petroleum process or from the operation of a grey iron cupola, blast furnace, or basic oxygen steel furnace into the atmosphere unless (1) the waste gas stream is burned at 1300 degrees F. for 0.3 seconds or greater in a direct-flame afterburner or boiler equipped with a combustion control indicator or (2) other devices or procedures are employed that reduce carbon monoxide emissions to levels comparable with a boiler or afterburner installation.

(50.3) 4.05.05 Control of Nitrogen Oxides Emissions

(a) Nitric Acid Manufacture

No person shall cause, suffer, allow or permit the emission of nitrogen oxides from nitric acid manufacturing plants into the outdoor atmosphere in excess of 5.5 pounds per ton of 100% acid produced.

(b) Existing Fuel-Burning Equipment

No person shall cause, suffer, allow or permit nitrogen oxides caused by the combustion of fuel in existing fuel-burning equipment to be discharged into the outdoor atmosphere in excess of:

- (1) 0.20 lb. per million BTU heat input, maximum 2-hour average expressed as NO_2 when gaseous fuel is burned.
- (2) 0.30 lb. per million BTU heat input, maximum 2-hour average expressed as NO_2 when liquid fuel is burned.
- (3) 0.70 lb. per million BTU heat input, maximum 2-hour average expressed as NO_2 when solid fuel is burned.

All furnaces with less than 250 million (250×10^6) BTU per hour input shall be excluded from 4.05.05(b).

- (c) Emission tests relating to this rule apply to recognized ASME methods. The approved method may be found in the Annual Book of ASTM Standards: Standard Method of Test for OXIDES OF NITROGEN IN GASEOUS COMBUSTION PRODUCTS, D1608-60 (Reapproved 1967). This test method may be adjusted or changed by the Executive Director to suit specific sampling conditions or needs based upon good practices, judgment and experience. When such adjustments are made, consideration shall be given to the effect of such change on emission standards.

SECTION IV
(Rule 6)

(50.6) 4.06.00 ODOR.

(2.0) 4.06.01 Scope.

This regulation shall apply to all operations that produce odorous emissions.

(50.6) 4.06.02 Prohibition of Objectionable Odor.

No person shall cause, suffer, allow or permit any source to discharge air contaminants which cause an objectionable odor without employing adequate measures for the control of odorous emissions, as may be approved by the Board.

(2.0) 4.06.03 Determination of Violation.

The determination of objectionable odor is to be made after a thorough review of all data relating to the situation which may be obtained by an investigation directed by the Executive Secretary, and by holding a public hearing to hear complaints as prescribed in these regulations. The investigation may include use of an odor panel survey and/or other methods approved by the Board.

(2.0) 4.06.04 Exception.

This Rule is not intended to be applied to accidental or other infrequent emissions of odors.

SECTION IV
(Rule 7)

(51.9) 4.07.00 INCINERATORS

(51.9) 4.07.01 Prohibition of Smoke, Particulates and Odor Emissions from Incinerators.

No owner shall cause, suffer, allow or permit the operation of an incinerator so as to discharge into the outdoor atmosphere smoke, particulate, or odor sufficient to cause a condition of air pollution.

(2.0) 4.07.02 Determination of Violation

(a) Smoke From Incinerators.

Smoke emitted into the atmosphere from any incinerator shall not be darker in shade than No. 1 on the Ringelmann Chart; or of such opacity as to obscure an observer's view to a degree greater than does smoke designated as No. 1 on the Ringelmann Chart (when used as a measure of opacity).

(b) Odor From Incinerators.

Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emissions of objectionable odors.

(51.9) 4.07.03 Emission Standards for Existing Incinerators

Incinerators shall not discharge particulate matter in excess of 0.14 grains per standard cubic foot of dry flue gas corrected to 12% carbon dioxide (without the contribution of auxiliary fuel). This limitation shall apply when the incinerator is operating at design capacity.

(51.9) 4.07.04 Flue-Fed Incinerators

Flue-fed incinerators (those which use the same flue for feeding the refuse and discharging the gases of combustion) are prohibited for incineration usage.

(9.0) 4.07.05 Emission Testing

Emission tests relating to this rule apply to recognized ASME methods. The approved methods are the ASME Test Code for Dust-Separating Apparatus (PTC-21-1941) and the ASME Test Code for Determining Dust Concentrations in Gas Streams. Procedures may be adjusted or changed by the Executive Director to suit specific sampling conditions or needs based on good practice, judgment and experience. When such tests are adjusted, consideration shall be given to the effect of such change on established emission standards.

SECTION IV
(Rule 8)

(51.2) 4.08.00 COAL REFUSE DISPOSAL AREAS

(2.0) 4.08.01 Purpose.

This regulation is adopted for the purpose of preventing, abating, and controlling air pollution caused by air contaminants discharged from burning coal refuse disposal areas.

(51.2) 4.08.02 Operation of New Coal Refuse Disposal Areas Prohibited Without Prior Approval.

The operation of a coal refuse disposal area, not used for the purpose of coal refuse disposal prior to the effective date of this regulations, is prohibited unless the procedures for disposal have been submitted to and approved by the Board prior to disposal. Application is to be made on forms provided by the Board.

(51.2) 4.08.03 Operation of Existing Coal Refuse Disposal Areas Prohibited Without Approval.

Within ninety (90) days after (a) the effective date of this regulation or (b) the application forms become available, whichever is later, or within such additional period as the Board may authorize, any person, firm, corporation or association who desires to continue the operation of an existing coal refuse disposal area shall make application to the Board, on forms provided by it, for approval to continue operation of such area. The operation of an existing coal refuse disposal area may continue while the application is under consideration by the Board and thereafter unless disapproved by the Board.

(51.2) 4.08.04 Guideline for Approval of Coal Refuse Disposal Areas.

(a) The procedure outlined in this section will be used as a basis for approval of coal refuse disposal areas; in no case shall refuse and like materials be deposited on or near any coal refuse disposal area.

(b) Site Selection

(1) Strip pits are considered to be suitable sites for the disposal of coal refuse. The overburden (i.e., rock clay, earth, etc. which must be removed to expose the coal seam) at strip pits are a ready source of seal for the refuse pile. Such piles when sealed with overburden are not likely to ignite because the spoil cover will prevent air from circulating within the pile and will also provide the pile with a blanket of non-combustible material.

- (2) Hillsides are not desirable sites for the disposal of coal refuse. If a hillside is to be used as a disposal site for coal refuse, the site should be prepared so as to minimize the possibility of shifting of the pile and ignition of the coal refuse.
- (3) Sites should be selected to minimize the possibility of stream pollution.

(c) Site Preparation

- (1) All vegetation should be cleaned from a strip 10 feet wide adjacent to and surrounding the coal refuse pile. This will prevent accidental ignition of the coal refuse from brush fires.
- (2) In case of strip pit sites, all coal outcrops should be protected by covering with a layer of clay or overburden
- (3) If an old coal refuse pile is to be reactivated and made into a disposal area, a barrier of clay or other inert material should be placed between the old pile and the new coal refuse.
- (4) If a pile is to be located on a hillside, disposal procedures to prevent the slippage of coal refuse must be employed. One procedure to be considered is the construction of a properly designed trench at the base of the pile.
- (5) If there is a possibility of stream pollution from drainage, run-off water should be diverted around the pile by trenching.

(d) Pile Construction

The following guidelines are to apply unless it can be demonstrated, to the satisfaction of the Board, that the proposed techniques in the application will achieve the same objectives.

- (1) Depositing of coal refuse on the coal refuse pile in layers is desirable. Each layer should be compacted with coal refuse hauling trucks or other suitable equipment in order to reduce voids and minimize air circulation within the pile.
- (2) Coal refuse should be deposited in layers not exceeding two feet in depth when practical. If the coal refuse is highly "reactive" each layer should be covered with a six-inch layer of clay or other inert material.

- (3) The sides of the pile, when possible, should have a slope that will allow access for heavy equipment to the pile, if needed. It will also permit better compaction of the sides and reduce air penetration into the pile.
- (4) The slopes (sides) of the pile should be sealed with clay or other sealing materials so as to prevent the flow of air within the pile. The seal should be applied as the pile is constructed. The seal should be planted with rapid growing vegetation to prevent erosion.
- (5) If mine rock cannot be adequately compacted when mixed or if it may cause size segregation when mixed with coal refuse, it should be disposed of in separate rock piles.
- (6) Drainage ditches for run-off water should be provided to prevent erosion of the face of the pile.
- (7) A pile should not be constructed by dumping coal refuse down the side of a hill, nor should a pile be extended by dumping down its side. A pile constructed in this manner cannot be compacted during construction. Also, this procedure will create many voids because of size segregation. If the coal refuse is highly reactive, the air circulation through the voids is likely to cause the coal refuse to ignite.
- (8) Where practical hillside piles should be formed by terracing.
- (9) If an aerial tramway, truck or belt conveyor is to be used to dispose of reactive coal refuse, bulldozers or other suitable equipment should be used to spread and compact the coal refuse.

(e) Trouble-Shooting

- (1) The coal refuse piles should be patrolled frequently to (a) insure that proper disposal procedures are being followed and (b) detect "hot spots."
- (2) As soon as a hot spot is detected, it should be either dug out and spread to cool or intensively compacted. This will minimize the chances of ignition.
- (3) If the coal refuse has ignited, the burning portion of the pile should be isolated if possible from the rest of the pile by cutting a trench to the surface of the earth. The face of the non-burning portion should be covered with inert sealing material. The fire in the burning section of the pile should be promptly brought under control by one of the following, or any other effective method:

- (a) Use water in conjunction with a shovel or bulldozer to dig out, level and extinguish the burning coal refuse.
- (b) Level the top, grade the slopes, compact intensively and seal the entire surface of the pile.
- (c) Seal the pile with a fine cleaning plant refuse (silt) and/or other suitable material.
- (d) Grout with slurry of water and limestone or cement.

(51.2) 4.08.05 Deliberate Ignition of a Coal Refuse Disposal Area is Prohibited.

The deliberate ignition of a coal refuse disposal area or the ignition of any materials on such an area by any person or persons is prohibited.

(51.2) 4.08.06 Burning Coal Refuse Disposal Areas.

- (a) Each burning coal refuse disposal area which causes air pollution will be considered on an individual basis by the Board. After considering the established facts and circumstances of the particular case, the Board will determine and may order the effectuation of those air pollution control measures which the Board deems reasonably adequate for each such coal refuse disposal area;
- (b) With respect to all other burning coal refuse disposal areas; the person responsible for such coal refuse disposal areas or the land on which such coal refuse disposal areas are located shall use due diligence to control air pollution from such coal refuse disposal areas. The Board shall determine what constitutes due diligence;
- (c) When the Board determines that air pollution exists or may be created, the person responsible for such coal refuse disposal area or the owner of the land on which such coal refuse disposal area is located shall submit to the Board a satisfactory program setting forth methods and procedures to eliminate, prevent, or reduce such air pollution. This program shall be submitted within thirty (30) days after notification and shall contain sufficient information to establish that such program can be executed with due diligence.

(2.0) 4.08.07 Exceptions.

Nothing in this regulation is intended to permit any practice which is a violation of any statute, ordinance or regulation.

SECTION IV
(Rule 9)

(51.2) 4.09.00 COKE OVENS AND CHARCOAL KILNS

(51.2) 4.09.01 Beehive Coke Ovens.

Beehive coke ovens should be constructed so that all emissions, both gaseous and particulate matter, are directed through an air pollution control device prior to emission to the ambient atmosphere. The control device should also provide for the complete combustion of all gases emitted from the oven.

(51.2) 4.09.02 Other By-Product Coke Ovens.

- (a) All by-product coke oven batteries shall have air pollution control equipment which will control contaminant emissions according to pertinent rules.
- (b) All by-product coke ovens shall control visible emissions to the extent provided in 4.02.01 (Rule 2) except as follows:
 - (1) When charging and discharging coke ovens, emissions of smoke the shade or appearance of which is not as dark as or darker than No. 2 on the Ringelmann Chart or the equivalent opacity of that Ringelmann Chart number shall be permitted for a period or periods aggregating no more than two (2) minutes per charge and one (1) minute per push.

(51.2) 4.09.03 Charcoal Kilns.

- (a) Charcoal kilns should be constructed so that all emissions, both gaseous and particulate matter, are directed through an air pollution control device prior to emission to the ambient atmosphere. The control device should provide for the complete combustion of all gases from the kiln.
- (b) Screening and crushing areas, loading and transfer points or any other place within the plant where fugitive dust may originate should be enclosed and controlled according to Section 4.04.02 (Rule 4).
- (c) Any air pollution control device used should provide for control of all contaminant emissions according to pertinent rules.

SECTION IV
(Rule 10)

(12.0) 4.10.00 MOBILE SOURCE EMISSIONS

(12.0) 4.10.01 Prohibition of Acts Affecting Emissions from Motor Vehicles

- (a) No person shall cause, suffer, allow, or permit the removal, disconnection or disabling of a crankcase emission control system or device, exhaust emission control system or device, fuel evaporative emission control system or device, or other air pollution control system or device which has been installed on a motor vehicle in accordance with federal laws and regulations while such motor vehicle is operating in the Commonwealth of Virginia.
- (b) Nor shall any person defeat the design purpose of any such motor vehicle pollution control system or device by installing therein or thereto any part or component which is not a standard factory replacement part or component of the device.
- (c) Nor shall the motor vehicle or its engine be operated with the motor vehicle pollution control system or device removed or otherwise rendered inoperable.
- (d) The provisions of the foregoing paragraphs under 4.10.01 shall not prohibit or prevent shop adjustments and/or replacements of equipment for maintenance or repair or the conversion of engines to low polluting fuels, such as, but not limited to, natural gas or propane.

(12.0) 4.10.02 Visible Emission for Mobile Source

(50.1.2)

- (a) No person shall cause or permit the emission of visible air contaminants from gasoline-powered mobile sources for longer than 5 consecutive seconds after the engine has been brought up to operation temperature.
- (b) No person shall cause or permit the emission of visible air contaminants from diesel-powered mobile sources of a density equal to or greater than 20 percent opacity for longer than 5 consecutive seconds after the engine has been brought up to operating temperature.
- (c) The propulsion engine of a commercial vehicle parked in a business or residential area shall not be left running more than three (3) minutes after the vehicle is parked, except when the propulsion engine provides auxiliary service other than for heating or air conditioning.

(2.0) 4.10.03 Determination of Violations

(a) (Reserve for future system of inspections).

SECTION VI

(8.0) 6.00 AIR POLLUTION EMERGENCY EPISODE

(2.0) 6.01 General Requirements

- (a) An Air Pollution Emergency Episode Plan provides standards and procedures to be followed whenever pollution of the air has the potential of reaching an emergency condition if allowed to go unchecked.
 - (b) Whenever the Executive Secretary or Regional Director determines the accumulation of air pollution may attain, is attaining or has attained a level or levels considered injurious to human health, conditions of air pollution designated as Forecast, Alert, Warning and Emergency shall be declared. In making a determination, the criteria defined in Section 6.02.00 shall be used as guidance.
 - (c) To assure compliance with this regulation, sources designated by the Executive Secretary shall submit standby emission reduction plans in accordance with Section 6.03.00. In accordance with such standby emission reduction plans, standby orders as specified in Section 6.04.00 shall be implemented as a designated level is reached.
 - (d) Nothing contained in this regulation shall be construed as allowing, permitting or maintaining an emission from any installation in the State to be subjected to a lesser degree of control than may be required for existing or new regulations adopted by the Board or other appropriate authority.
- 6.02(a) A condition justifying the proclamation of a Forecast, Alert, Warning or Emergency shall be deemed to exist whenever the Executive Secretary or Regional Director determines that the accumulation of one or more air pollutants in any place, locality, county or other area in the State may attain, is attaining or has attained levels which could, if such levels are sustained or exceeded, lead to a threat to the health of the public. In making this determination the specified conditions in Section 6.02.00 (b) (c) and (d) shall be used as guidance.

(b) Episode Criteria

(1) Forecast Stage

An internal administrative watch shall be declared by the Executive Secretary or Regional Director whenever the national, local or staff meteorologist issues a forecast indication atmospheric stagnation will cover any substantial

portion of the Commonwealth of Virginia for an extended period. Such a weather forecast will indicate meteorological conditions which are expected to inhibit pollutant dispersion. The watch shall be in effect for those areas of the State covered by the weather forecast and it shall continue throughout the atmospheric stagnation period. Such weather forecasts indicating atmospheric stagnation will take the form of:

- (i) A regional Air Stagnation Advisory including any substantial part of the Commonwealth of Virginia issued by the local meteorologist at the Environmental Meteorological Support Unit (EMSU).
- (ii) A forecast by the staff meteorologist indicating localized meteorological conditions which inhibit dispersion for an extended period of time.

(2) Alert Stage

An Alert shall be declared by the Executive Secretary or Regional Director when any one of the following pollutant levels is reached at any monitoring site concurrent with:

- (i) Consultation with the national, local or staff meteorologist which indicates that an atmospheric stagnation exists and/or
- (ii) A determination by the Executive Secretary or Regional Director that the pollutant level is representative of air quality in a Region and the concentrations of pollutants can be expected to remain at the following indicated levels for 12 or more hours. Consultation with the air pollution control agencies of the affected jurisdictions will be accomplished to help evaluate local situations.

<u>POLLUTANT</u>	<u>AVERAGE</u>	<u>ug/m³</u>	<u>ppm</u>
SO ₂	24 hour	800	.3
Particulates	24 hour	375	(3.0 COH)
Product of SO ₂ x Particulates	24 hour	65,000	(.2 COH-ppm product)
CO	8 hour	17,000	15

<u>POLLUTANT</u>	<u>AVERAGE</u>	<u>ug/m³</u>	<u>ppm</u>
Oxidants	1 hour	200	.1
NO ₂	1 hour	1,130	.6
	24 hour	282	.15

(3) Warning Stage

A Warning shall be declared by the Executive Secretary or Regional Director when any one of the following pollutant levels is reached at any monitoring site concurrent with:

- (i) Consultation with the national, local or staff meteorologist which indicates that an atmospheric stagnation exists and/or
- (ii) A determination by the Executive Secretary or Regional Director that the pollutant level is representative of air quality in a Region and the concentrations of pollutants can be expected to remain at the following indicated levels for 12 or more hours. Consultation with the air pollution control agencies of the affected jurisdictions will be accomplished to help evaluate local situations.

<u>POLLUTANT</u>	<u>AVERAGE</u>	<u>ug/m³</u>	<u>ppm</u>
SO ₂	24 hour	1,600	.6
Particulates	24 hour	625	5.0(COH)
Product of SO ₂ x Particulates	24 hour	261,000	(.8 COH-ppm product)
CO	8 hour	34,000	30.0
Oxidants	1 hour	800	.4
NO ₂	1 hour	2,260	1.2
	24 hour	565	.30

(4) Emergency Stage

An Emergency shall be declared by the Governor of the Commonwealth of Virginia when any one of the following pollutant levels is reached at any monitoring site concurrent with:

- (i) Consultation with the national, local or staff meteorologist which indicates that an atmospheric stagnation exists and/or
- (ii) A determination by the Executive Secretary or Regional Director that the pollutant level is representative of air quality in a Region and the concentrations of pollutants can be expected to remain at the following indicated levels for 12 or more hours. Consultation with the air pollution control agencies of the affected jurisdictions will be accomplished to help evaluate local situations.

<u>POLLUTANT</u>	<u>AVERAGE</u>	<u>ug/m³</u>	<u>ppm</u>
SO ₂	24 hour	2,100	.8
Particulates	24 hour	825	(7.0 COH)
Product of SO ₂ x Particulates	24 hour	393,000	(1.2 COH-ppm product)
CO	8 hour	46,000	40.0
Oxidants	1 hour	1,200	.6
NO ₂	1 hour	3,000	1.6
	24 hour	750	.4

(5) Termination

Termination of any existent stage of the Air Pollution Episode shall be called by the Governor of the Commonwealth of Virginia or the Executive Secretary or Regional Director based on

- (i) Consultation with the national, local or staff meteorologist which indicates that the atmospheric conditions justify termination and/or
 - (ii) Appropriate reduction in pollutant levels. As the criteria for a given level are no longer being met, the next lower level will be assumed.
- (c) When the Executive Secretary or Regional Director determines that a specified criteria level is being approached and may be reached at one or more monitoring sites solely because of emissions from a limited number of sources, it may act to prevent the attainment

of the episode level by notifying such source(s) that the pre-planned abatement strategies of Table I, II, or III or the standby plans are required, insofar as it applies to such source(s), and shall be put into effect until a satisfactory reduction in the ambient pollution concentration has been achieved.

- (d) The Alert, Warning, and Emergency stages may be activated on the basis of deteriorating air quality alone; i.e., an atmospheric stagnation forecast need not be in effect, subject to the determinations specified in Section 6.02(b)(2)(ii), (b)(3)(ii), and (b)(4)(ii).

(8.0) 6.03 Standby Emission Reduction Plans

- (a) Any person responsible for the operation of an installation specifically identified in Tables I, II, and III of this section shall prepare standby emission reduction plans, consistent with good industrial practice and safe operating procedures, for reducing emissions creating air pollution during periods of Alert, Warning and Emergency. Standby emission reduction plans shall be designed to reduce or eliminate emissions in accordance with the objectives set forth in Tables I, II and III as applicable.
- (b) Any person responsible for the operation of a source of emissions not specifically identified under Section 6.03(a) shall, when requested by the Executive Secretary or Regional Director in writing, prepare standby emission reduction plans, consistent with good industrial practice and safe operating procedures, for reducing emissions creating air pollution during periods of Alert, Warning and Emergency. Standby emission reduction plans shall be designed to reduce or eliminate emissions in accordance with the objectives set forth in Tables I, II and III as applicable.
- (c) Standby emission reduction plans as required in Section 6.03(a) and (b) shall be in writing and show the source of emissions, the approximate amount of reduction of emissions to be achieved, the time necessary to achieve the reduction after being notified to implement the plan, and a description of the manner in which the reduction will be achieved during an Alert, Warning and Emergency period in accordance with the objectives set forth in Table I, II, and III. Such plans shall be submitted in the form specified by the Executive Secretary or the Regional Director.
- (d) During a condition of Alert, Warning or Emergency, standby emission reduction plans as required by this section shall be made immediately available on the premises to any person authorized to enforce regulations promulgated under terms of the Air Pollution Control Law of Virginia.

- (e) Standby emission reduction plans as required by this section shall be submitted to the Executive Secretary or Regional Director upon request within 30 days of the receipt of such request; such standby emission reduction plans shall be subject to review and approval by the Executive Secretary or Regional Director. If, in the opinion of the Executive Secretary or Regional Director, such standby emission reduction plans do not carry out the objectives set forth in Tables I, II, and III, the Executive Secretary or Regional Director may disapprove said standby emission reduction plans, state the reason for disapproval and recommend specific amendments to the proposed standby emission reduction plans. The revised plan shall be resubmitted within a time period specified by the Executive Secretary or Regional Director. Any person aggrieved by an order requiring the preparation of a revised plan shall be entitled to an appeal under the provisions of Title 10 of the Code of Virginia of 1950 as amended. If any person fails to submit a standby emission reduction plan within the time period specified, which in the opinion of the Executive Secretary or Regional Director does not carry out the objectives set forth in Table I, II and III, the Executive Secretary or Regional Director shall promulgate such standby emission reduction plan as will meet the objectives stated in Tables I, II, and III herein. Such plan shall thereafter be the standby emission reduction which the person responsible shall put into effect upon the declaration by the Governor or the Executive Secretary or Regional Director of an air pollution episode Alert, Warning or Emergency.

(2.0) 6.04 Control Requirements

- (a) When the Executive Secretary or Regional Director declares an Air Pollution Alert, any person responsible for the operation of a source of air pollutants as set forth in Table I shall take all Air Pollution Alert actions as required for such source of air pollutants and shall put into effect the preplanned abatement strategy for an Air Pollution Alert.
- (b) When the Executive Secretary or Regional Director declares an Air Pollution Warning, any person responsible for the operation of a source of air pollutants as set forth in Table II shall take all Air Pollution Warning actions as required for such source of air pollutants and shall put into effect the preplanned abatement strategy for an Air Pollution Warning.
- (c) When the Governor declares an Air Pollution Emergency any person responsible for the operation of a source of air pollutant as described in Table III shall take all Air Pollution Emergency actions as required for such source of air pollutants and shall put into effect the preplanned abatement strategy for an Air Pollution Emergency.

- (d) When the Executive Secretary or Regional Director determines that a specified criteria level has been reached at one or more monitoring sites solely because of emissions from a limited number of sources, he shall notify such source(s) that the preplanned abatement strategies of Tables I, II, and III of the standby plans are required, insofar as it applies to such source(s), and shall be put into effect until the criteria of the specified level are no longer met.
- (e) When the Executive Secretary or Regional Director determines that a specific pollutant level caused the declaration of an Alert or Warning Stage and that curtailment of emissions from certain sources would have no effect on that pollutant level, he may exercise good judgment in determining which abatement strategies shall be put into effect.

(2.0) 6.05 Participation of Local Air Pollution Control Offices

- (a) Local Air Pollution Control Officers shall develop local plans which will establish standard operating procedures and allocation of responsibilities (including public relations) to be placed in effect in the event of an air pollution episode. A copy of such plans and any subsequent changes to the plans shall be furnished to the Executive Secretary and the local Regional office of the State Board.
- (b) The statewide Episode Control Center will be located in Richmond. Operational, communication, and public relations procedures for the control of Air Pollution Episodes by the State Episode Control Center will be promulgated by the Executive Secretary to all local air pollution control agencies and regional offices.

TABLE I
ABATEMENT STRATEGIES EMISSION REDUCTION PLANS
ALERT LEVEL

Part A. GENERAL

1. There shall be no open burning by any persons of tree waste, vegetation, refuse, or debris in any form.
2. The use of incinerators for the disposal of any form of solid waste shall be limited to the hours between 12:00 noon and 4:00 p.m.
3. Persons operating fuel-burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12:00 noon and 4:00 p.m.
4. Persons operating motor vehicles should eliminate all unnecessary operations.

Part B. SOURCE CURTAILMENT

Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for this Alert level.

<u>Source of Air Pollution</u>	<u>Control Action</u>
1. Coal or oil-fired electric power generating facilities.	a. Substantial reduction by utilization of fuels having low ash and sulfur content. b. Maximum utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing. c. Substantial reduction by diverting electric power generation to facilities outside of Alert Area.
2. Coal and oil-fired process steam generating facilities.	a. Substantial reduction by utilization of fuels having low ash and sulfur content.

Source of Air Pollution

Control Action

3. Manufacturing industries of the following classifications:

Primary Metal Industry.
Petroleum Refining Operations.
Chemical Industries.
Mineral Processing Industries.
Paper and Allied Products.
Grain Industry.

- b. Maximum utilization of midday (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing.
- c. Substantial reduction of steam load demands consistent with continuing plant operations.
- a. Substantial reduction of air pollutants from manufacturing operations by curtailing, postponing, or deferring production and all operations.
- b. Maximum reduction by deferring trade waste disposal operations which emit solid particles, gas vapors or malodorous substances.
- c. Maximum reduction of heat load demands for processing.
- d. Maximum utilization of midday (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing.

TABLE II
EMISSION REDUCTION PLANS

WARNING LEVEL

Part A. GENERAL

1. There shall be no open burning by any persons of tree waste, vegetation, refuse, or debris in any form.
2. The use of incinerators for the disposal of any form of solid waste or liquid waste shall be prohibited.
3. Persons operating fuel-burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12:00 noon and 4:00 p.m.
4. Persons operating motor vehicles must reduce operations by the use of car pools and increased use of public transportation and elimination of unnecessary operation.

Part B. SOURCE CURTAILMENT

Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for this Warning Level.

<u>Source of Air Pollution</u>	<u>Control Action</u>
1. Coal or oil-fired electric power generating facilities.	a. Maximum reduction by utilization of fuels having lowest ash and sulfur content. b. Maximum utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing. c. Maximum reduction by diverting electric power generation to facilities outside of Warning Area.
2. Oil and oil-fired process steam generating facilities.	a. Maximum reduction by utilization of fuels having the lowest available ash and sulfur content.

- b. Maximum utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing.
 - c. Making ready for use a plan of action to be taken if an emergency develops.
 - 3. Manufacturing industries which require considerable lead time for shut-down including the following classifications:
 - Petroleum Refining.
 - Chemical Industries.
 - Primary Metals Industries.
 - Glass Industries.
 - Paper and Allied Products.
 - a. Maximum reduction of air contaminants from manufacturing operations by, if necessary, assuming reasonable economic hardships by postponing production and allied operation.
 - b. Maximum reduction by deferring trade waste disposal operations which emit solid particles, gases, vapors, or malodorous substances.
 - c. Maximum reduction of heat load demands for processing.
 - d. Maximum utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing.
 - 4. Manufacturing industries which require relatively short lead times for shut-down including the following classifications:
 - Primary Metals Industries.
 - Chemical Industries.
 - Mineral Processing Industries.
 - Grain Industry.
 - a. Elimination of air pollutants from manufacturing operations by ceasing, curtailing, postponing, or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment.
 - b. Elimination of air pollutants from trade waste disposal processes which emit solid particles, gases, vapors, or malodorous substances.
 - c. Maximum reduction of heat load demands for processing.

- d. Maximum utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

TABLE III
EMISSION REDUCTION PLANS
EMERGENCY LEVEL

Part A. GENERAL

1. There shall be no open burning by any persons of tree waste, vegetation, refuse, or debris in any form.
2. The use of incinerators for the disposal of any form of solid or liquid waste shall be prohibited.
3. All places of employment described below shall immediately cease operations.
 - a. Mining and quarrying of nonmetallic minerals.
 - b. All construction work except that which must proceed to avoid emergent physical harm.
 - c. All manufacturing establishments except those required to have in force an air pollution emergency plan.
 - d. All wholesale trade establishments; i.e., places of business primarily engaged in selling merchandise to retailers, or industrial, commercial, insitutional or professional users, or to other wholesalers, or acting as agents in buying merchandise for or selling merchandise to such persons or companies, except those engaged in the distribution of drugs, surgical supplies and food.
 - e. All offices of local, county, and State government including authorities, joint meetings, and other public bodies excepting such agencies which are determined by the chief administrative officer of local, county, or State government, authorities, joint meetings and other public bodies to be vital for public safety and welfare and the enforcement of the provisions of this order.
 - f. All retail trade establishments except pharmacies, surgical supply distributors, and stores primarily engaged in the sale of food.
 - g. Banks, credit agencies other than banks, securities and commodities brokers, dealers, exchanges and services; offices of insurance carriers, agents and brokers, real estate offices.

- h. Wholesale and retail laundries, laundry services and cleaning and dyeing establishments; photographic studios; beauty shops, barber shops, shoe repair shops.
 - i. Advertising offices; consumer credit reporting, adjustment and collection agencies; duplicating, addressing, blueprinting; photocopying, mailing, mailing list and stenographic services; equipment rental services, commercial testing laboratories.
 - j. Automobile repair, automobile services, garages.
 - k. Establishments rendering amusement and recreational services including motion picture theaters.
 - l. Elementary and secondary schools, colleges, universities, professional schools, junior colleges, vocational schools, and public and private libraries.
4. All commercial and manufacturing establishments not included in this order will institute such actions as will result in maximum reduction of air pollutants from their operation by ceasing, curtailing, or postponing operations which emit air pollutants to the extent possible without causing injury to persons or damage to equipment.
5. The use of motor vehicles is prohibited except in emergencies with the approval of local or State police.

Part B. SOURCE CURTAILMENT

Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for this Emergency Level.

<u>Source of Air Pollution</u>	<u>Control Action</u>
1. Coal or oil-fired electric power generating facilities.	a. Maximum reduction by utilization of fuels having lowest ash and sulfur content. b. Maximum utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing. c. Maximum reduction by diverting electric power generation to facilities outside of Emergency Area.

2. Coal and oil-fired process steam generating facilities.
 - a. Maximum reduction by reducing heat and steam demands to absolute necessities consistent with preventing equipment damage.
 - b. Maximum utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing.
 - c. Taking the action called for in the emergency plan.
3. Manufacturing industries of the following classifications.
 - Primary Metals Industries.
 - Petroleum Refining.
 - Chemical Industries.
 - Mineral Processing Industries.
 - Grain Industry.
 - Paper and Allied Products.
 - a. Elimination of air pollutants from manufacturing operations by ceasing, curtailing, postponing or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment.
 - b. Elimination of air pollutants from trade waste disposal processes which emit solid particles, gases, vapors, or malodorous substances.
 - c. Maximum reduction of heat load demands for processing.
 - d. Maximum utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

FEDERALLY PROMULGATED
REGULATIONS

(9.0) 52.2427 Source Surveillance

(a) Periodic testing of stationary sources.

Even though the Air Pollution Control Law of Virginia and the Regulations for the Control and Abatement of Air Pollution make owners or operators of sources of air contaminant emission responsible for monitoring their stacks and reporting their emissions, it may be necessary from time to time to conduct emission tests on point sources to confirm the validity of such data. Such emission test may be completed by means of:

1. material balance
2. engineering evaluation
3. visual observations, and
4. actual stack test.

It is not possible at this time to define quantitatively how often this will be done but it will be done on the basis of priority with sources emitting 100 tons per year or more given priority and those with a visible emission problem following close behind.

The policy for periodic testing of stationary sources will be to require the owner to perform or to have performed the actual stack emission test. Such testing will be monitored by qualified Staff personnel. The results of these tests will be filed with the Board. The Staff of the Board plans to perform stack tests on at least two State facilities each year. This will provide the expertise for monitoring other tests.

Actual stack tests will be required on major sources (electric power plants, paperpulp manufacturing, acid manufacturing, coal cleaning plants, etc.) dependent upon in-stack monitoring equipment, calculated emission, and visible emission evaluation. If in-stack monitoring equipment is not used, actual testing will be required at least every two years.

On smaller sources (hot mix asphalt plants, fertilizer plants, incinerators, etc.) random testing will be required based on visible emission evaluation, dubious compliance status, cause of complaints from concerned citizens, etc. A minimum of twenty source tests, selected at random, will be required each year.

(d) Monitoring transportation sources.

- (1) This section is applicable to the Commonwealth of Virginia.
- (2) In order to assure the effectiveness of the inspection and maintenance program approved in 52.2423 and required by

52.2441, and the retrofit devices required under 52.2444, 52.2445, 52.2446, and 52.2447 the Commonwealth shall monitor the actual per-vehicle emissions reductions occurring as a result of such measures. All data obtained from such monitoring shall be included in the quarterly report submitted to the Administrator by the Commonwealth of Virginia in accordance with 51.7 of this chapter. The first quarterly report shall cover the period January 1 to March 31, 1976.

- (3) In order to assure the effective implementation of the car pool locator, express bus lanes, increased bus fleet and service, elimination of free on-street commuter parking, elimination of free employee parking, and the parking surcharge approved in 52.2423, the Commonwealth shall monitor vehicle miles traveled and average vehicle speeds for each area in which such sections are in effect and during such time periods as may be appropriate to evaluate the effectiveness of such a program. All data obtained from such monitoring shall be included in the quarterly report submitted to the Administrator by the Commonwealth of Virginia in accordance with 51.7 of this chapter. The first quarterly report shall cover the period from July 1 to September 30, 1974. The vehicle miles traveled and vehicle speed data shall cover the period from July 1 to September 30, 1974. The vehicle miles traveled and vehicle speed data shall be collected on a monthly basis and submitted in a format similar to Table 1.

TABLE 1

Time period.....	
Affected area.....	
	VMT or average vehicle speed
Roadway type	Vehicle type (1) Vehicle type (2):
Freeway.....	
Arterial.....	
Collector.....	
Local.....	

¹Continue with other vehicle types as appropriate.

(4) No later than March 1, 1974, the Commonwealth shall submit to the Administrator a compliance schedule to implement this section. The program description shall include the following:

- (i) The agency or agencies responsible for conducting, overseeing, and maintaining the monitoring program.
- (ii) The administrative procedures to be used.
- (iii) A description of the methods to be used to collect the emission data, VMT data, and vehicle speed data; a description of the geographical area to which the data apply; identification of the location at which the data will be collected; and the time periods during which the data will be collected.

(8.0) 52.2435 Compliance schedules.

- (a) The requirements of 51.15 are not met for the measures for parking surcharge, elimination of free on-street commuter parking, elimination of free employee parking, increased bus fleet and service, and exclusive bus lanes. Provisions to implement the requirements of 51.15 are promulgated in this section.
- (b) With respect to the parking surcharge measure approved in 52.2423:
 - (1) The Commonwealth of Virginia shall no later than June 30, 1974, submit to the Administrator for his approval a precise description of areas within the Virginia portion of the National Capital AQCR which are at the time adequately served by mass transit, and those areas which in the judgment of the Commonwealth will be adequately served by mass transit by June 30, 1975. The documentation and policy assumptions used to select these areas shall be included with this submission.
 - (2) The Commonwealth of Virginia shall by June 30, 1975, and each succeeding year submit to the Administrator for his approval a revised list of those areas which are adequately served by mass transit. Additional areas must be included as mass transit service is increased, unless the Commonwealth of Virginia can affirmatively demonstrate that no additional areas can be included.
- (c) With respect to the measure for elimination of free on-street commuter parking approved in 52.2423:
 - (1) Each potential subdivision of the Commonwealth of Virginia within the National Capital AQCR shall, no later than June 30, 1974, submit to the Administrator for his approval a compliance schedule, including legally adopted regulations, enforcement procedures, and a description of resources available. The compliance schedule shall provide:
 - (i) For implementing the on-street parking ban in all areas within which a surcharge will be required by paragraph (b) of this section. This program shall prohibit all parking for more than two hours by non-residents of the area subject to the ban during the hours from 7 a.m. to 7 p.m. Monday through Friday (excepting holidays) on any street within such areas. The program shall also provide for a sticker system, under which residents of such area may also be exempted from the ban, and for a system (whether by

notification to the enforcement authorities, or otherwise) for also exempting bona fide visitors to residents of such areas from the ban.

- (ii) The precise resources that will be devoted to enforcing this measure, the method of enforcement to be used (for example, chalking tires), and the penalties for violation. The compliance schedule shall at a minimum provide that violators shall be subject to a \$10.00 fine.

(d)-(e) (Reserved)

(f) With respect to the express bus lane measure approved in 52.2423:

- (1) The Commonwealth of Virginia shall no later than January 1, 1975, establish exclusive bus lanes in the following corridors:
 - (i) George Washington Parkway - Washington Street - Jefferson Davis Highway from Fort Hunt to National Airport.
 - (ii) U.S. Route 50 from Seven Corners to the Virginia-District of Columbia boundary.

Such lanes shall be inbound during the morning peak period and outbound during the evening peak period.

- (2) The Commonwealth of Virginia shall submit to the Administrator, no later than March 1, 1974, a schedule showing the steps which it will take to establish exclusive bus lanes in those corridors enumerated in paragraph (f)(1) of this section. Each schedule shall be subject to approval by the Administrator and shall include as a minimum the following:
 - (i) Identification of streets or highways that shall have portions designated for exclusive bus lanes.
 - (ii) The date by which each street or highway shall be designated.
- (3) Exclusive bus lanes must be prominently indicated by distinctively painted lines, pylons, overhead signs, or physical barriers.
- (4) Application for substitution of a corridor for any of those listed in paragraph (f)(1) of this section shall be made by the Commonwealth of Virginia for the Administrator's approval no later than March 1, 1974.

(12.0) 52.2438 Gasoline transfer vapor control.

- (a) "Gasoline" means any petroleum distillate having a Reid vapor pressure of 4 pounds or greater.
- (b) This section is applicable in the Virginia portion of the National Capital Interstate AQCR.
- (c) No person shall transfer gasoline from any delivery vessel into any stationary storage container with a capacity greater than 250 gallons unless the displaced vapors from the storage container are processed by a system of no less than 90 percent by weight of organic compounds in said vapors displaced from the stationary container location.
 - (1) The vapor recovery portion of the system shall include one or more of the following:
 - (i) A vapor tight return line from the storage container to the delivery vessel and a system that will ensure that the vapor return line is connected before gasoline can be transferred into the container.
 - (ii) Refrigeration-condensation system or equivalent designed to recover no less than 90 percent by weight of the organic compounds in the displaced vapor.
 - (2) If a "vapor-tight vapor return" system is used to meet the requirements of this section, the system shall be so constructed as to be readily adapted to retrofit with an adsorption system, refrigeration-condensation system, or equivalent vapor removal system, and so constructed as to anticipate compliance with 52.2439.
 - (3) The vapor-laden delivery vessel shall be subject to the following conditions:
 - (i) The delivery vessel must be so designed and maintained as to be vaportight at all times.
 - (ii) The vapor-laden delivery vessel may be refilled only at facilities equipped with vapor recovery systems or the equivalent, which can recover at least 90 percent by weight of the organic compounds in the vapors displaced from the delivery vessel during refilling.
 - (iii) Gasoline storage compartments of one thousand gallons or less in gasoline delivery vehicles presently in use on the promulgation date of this regulation

will not be required to be retrofitted with a vapor return system until January 1, 1977.

- (iv) Facilities which have a daily throughput of 20,000 gallons of gasoline or less are required to have a vapor recovery system in operation no later than May 31, 1977. Delivery vessels and storage containers served exclusively by facilities required to have a vapor recovery system in operation no later than May 31, 1977, also are required to meet the provisions of this section no later than May 31, 1977.
- (d) The provisions of paragraph (c) of this section shall not apply to the following:
 - (1) Stationary containers having a capacity less than 550 gallons used exclusively for the fueling of implements of husbandry.
 - (2) Any container having a capacity less than 2,000 gallons installed prior to promulgation of this section.
 - (3) Transfers made to storage tanks equipped with floating roofs or their equivalent.
- (e) Every owner or operator of a stationary storage container or delivery vessel subject to this section shall comply with the following compliance schedule:
 - (1) June 1, 1974 - Submit to the Administrator a final control plan, which describes at a minimum the steps which will be taken by the source to achieve compliance with the provisions of paragraph (c) of this section.
 - (2) March 1, 1975 - Negotiate and sign all necessary contracts for emission control systems, or issue orders for the purchase of component parts to accomplish emission control.
 - (3) May 1, 1975 - Initiate on-site construction or installation of emission control equipment.
 - (4) February 1, 1976 - Complete on-site construction or installation of emission control equipment.
 - (5) March 1, 1976 - Assure final compliance with the provisions of paragraph (c) of this section.
 - (6) Any owner or operator of sources subject to the compliance schedule in this paragraph shall certify to the Administrator, within 5 days after the deadline for each increment of

progress, whether or not the required increment of progress has been met.

(f) Paragraph (e) of this section shall not apply:

- (1) To a source which is presently in compliance with the provisions of paragraph (c) of this section and which has certified such compliance to the Administrator by June 1, 1974. The Administrator may request whatever supporting information he considers necessary for proper certification.
 - (2) To a source for which a compliance schedule is adopted by the State and approved by the Administrator.
 - (3) To a source whose owner or operator submits to the Administrator, by June 1, 1974, a proposed alternative schedule. No such schedule may provide for compliance after March 1, 1976. Any such schedule shall provide for certification to the Administrator, within 5 days after the deadline for each increment therein, as to whether or not that increment has been met. If promulgated by the Administrator, such schedule shall satisfy the requirements of this paragraph for the affected source.
- (g) Nothing in this section shall preclude the Administrator from promulgating a separate schedule for any source to which the application of the compliance schedule in paragraph (e) of this section fails to satisfy the requirements of 51.15 (b) and (c) of this chapter.
- (h) Any gasoline dispensing facility subject to this section which installs a storage tank after the effective date of this section shall comply with the requirements of paragraph (c) of this section by March 1, 1976, and prior to that date shall comply with paragraph (e) of this section as far as possible. Any facility subject to this section which installs a storage tank after March 1, 1976, shall comply with the requirements of paragraph (c) of this section at the time of installation.

(12.0) 52.2439 Control of evaporative losses from the filling of vehicular tanks.

- (a) "Gasoline" means any petroleum distillate having a Reid vapor pressure of 4 pounds or greater.
- (b) This section is applicable in the Virginia portion of the National Capital Interstate AQCR.
- (c) A person shall not transfer gasoline to an automotive fuel tank from a gasoline dispensing system unless the transfer is made through a fill nozzle designed to:
 - (1) Prevent discharge of hydrocarbon vapors to the atmosphere from either the vehicle filler neck or dispensing nozzle;
 - (2) Direct vapor displaced from the automotive fuel tank to a system wherein at least 90 percent by weight of the organic compounds in displaced vapors are recovered; and
 - (3) Prevent automotive fuel tank overfills or spillage on fill nozzle disconnect.
- (d) The system referred to in paragraph (c) of this section may consist of a vapor-tight return line from the fill nozzle-filler neck interface to the dispensing tank or to an adsorption, absorption, incineration, refrigeration-condensation system or its equivalent.
- (e) Components of the systems required by 52.2439 may be used for compliance with paragraph (c) of this section.
- (f) If it is demonstrated to the satisfaction of the Administrator that it is impractical to comply with the provisions of paragraph (c) of this section as a result of vehicle fill neck configuration, location, or other design features of a class of vehicles, the provisions of this section shall not apply to such vehicles. However, in no case shall such configuration exempt any gasoline dispensing facility from installing and using in the most effective manner a system required by paragraph (c) of this section.
- (g) Every owner or operator of a gasoline dispensing system subject to this section shall comply with the following compliance schedule:
 - (1) June 1, 1974 - Submit to the Administrator a final control plan, which describes at a minimum the steps which will be taken by the source to achieve compliance with the provisions of paragraph (c) of this section.
 - (2) November 1, 1974 - Negotiate and sign all necessary contracts for emission control systems, or issue orders for

the purchase of component parts to accomplish emission control.

- (3) January 1, 1975 - Initiate on-site construction or installation of emission control equipment.
 - (4) May 1, 1977 - complete on-site construction installation of emission control equipment or process modification.
 - (5) May 31, 1977 - Assure final compliance with the provisions of paragraph (c) of this section.
 - (6) Any owner or operator of sources subject to the compliance schedule in this paragraph shall certify to the Administrator, within 5 days after the deadline for each increment of progress, whether or not the required increment of progress has been met.
- (h) Paragraph (g) of this section shall not apply:
- (1) To a source which is presently in compliance with the provisions of paragraph (c) of this section and which has certified such compliance to the Administrator by June 1, 1974. The Administrator may request whatever supporting information he considers necessary for proper certification.
 - (2) To a source for which a compliance schedule is adopted by the State and approved by the Administrator.
 - (3) To a source whose owner or operator submits to the Administrator, by June 1, 1974, a proposed alternative schedule. No such schedule may provide for compliance after May 31, 1977. Any such schedule shall provide for certification to the Administrator, within 5 days after the deadline for each increment therein, as to whether or not that increment has been met. If promulgated by the Administrator, such schedule shall satisfy the requirements of this paragraph for the affected source.
- (i) Nothing in this section shall preclude the Administrator from promulgating a separate schedule for any source to which the application of the compliance schedule in paragraph (g) of this section fails to satisfy the requirements of 51.15 (b) and (c) of this chapter.
- (j) Any gasoline dispensing facility subject to this section which installs a gasoline dispensing system after the effective date of this section shall comply with the requirements of paragraph (c) of this section by May 31, 1977, and prior to that date shall comply with paragraph (g) of this section as far as possible. Any

facility subject to this section which installs a gasoline dispensing system after May 31, 1977, shall comply with the requirements of paragraph (c) of this section at the time of installation.

(50.4) 52.2440 Control of dry cleaning solvent evaporation.

(a) Definitions:

- (1) "Dry cleaning operation" means that process by which an organic solvent is used in the commercial cleaning of garments and other fabric materials.
- (2) "Organic solvents" means organic materials, including diluents and thinners, which are liquids at standard conditions and which are used as dissolvers, viscosity reducers, or cleaning agents.
- (3) "Photochemically reactive solvent" means any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified below or which exceeds any of the following individual percentage composition limitations, as applied to the total volume of solvent.
 - (i) A combination of hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones having an olefinic or cyclo-olefinic type of unsaturation: 5 percent;
 - (ii) A combination of aromatic compounds with 8 or more carbon atoms to the molecule except ethylbenzene: 8 percent
 - (iii) A combination of ethylbenzene or ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent.

- (b) This section is applicable to the Virginia portion of the National Capital Interstate Region.
- (c) No person shall operate a dry cleaning operation using other than perchloroethylene, 1,1,1-trichloroethane, or saturated halogenated hydrocarbons unless the uncontrolled organic emissions from such operation are reduced at least 85 percent; provided, that dry cleaning operations emitting less than 8 pounds per hour and less than 40 pounds per day of uncontrolled organic materials are exempt from the requirement of this section.
- (d) If incineration is used as a control technique, 90 percent or more of the carbon in the organic emissions being incinerated must be oxidized to carbon dioxide.
- (e) Any owner or operator of a source subject to this section shall achieve compliance with the requirements of paragraph (c) of this section by discontinuing the use of photochemically reactive sol-

vents no later than January 31, 1974, or by controlling emissions as required by paragraphs (c) and (d) of this section no later than May 31, 1975.

(12.0) 52.2441 Inspection and maintenance program.

(a) Definitions:

- (1) "Inspection and maintenance program" means a program for reducing emissions from in-use vehicles through identifying vehicles that need emission control related maintenance and requiring that such maintenance be performed.
- (2) "Light-duty vehicle" means a gasoline-powered motor vehicle rated at 6,000 lb gross vehicle weight (GVW) or less.
- (3) "Medium-duty vehicle" means a gasoline-powered motor vehicle rated at more than 6,000 lb GVW and less than 10,000 lb GVW.
- (4) "Heavy-duty vehicle" means a gasoline-powered motor vehicle rated at 10,000 lb GVW or more.
- (5) All other terms used in this section that are defined in Part 51, Appendix N, are used herein with the meanings so defined.

(b) This section is applicable within the Virginia portion of the National Capital Interstate AQCR.

(c) In connection with the light-duty vehicle inspection and maintenance program for the area specified in paragraph (b) of this section approved by the Administrator pursuant to 52.2423, the Commonwealth of Virginia shall establish an inspection and maintenance program applicable to all medium-duty and heavy-duty vehicles registered in any area specified in paragraph (b) of this section that operate on public streets or highways over which it has ownership or control. The Commonwealth may exempt any class or category of vehicles that the Commonwealth finds is rarely used on public streets or highways (such as classic or antique vehicles). Under the program, the State shall:

- (1) Inspect all medium-duty and heavy-duty motor vehicles at periodic intervals no more than 1 year apart.
- (2) Apply inspection failure criteria consistent with the emission reductions claimed in the plan for the strategy.
- (3) Ensure that failed vehicles receive the maintenance necessary to achieve compliance with the inspection standards, and retest failed vehicles following maintenance.
- (4) (Reserved)

- (5) Begin the first inspection cycle by January 1, 1975, completing it by January 1, 1976.
- (6) Designate an agency or agencies responsible for conducting the inspection and maintenance program.
- (d) After January 1, 1976, the Commonwealth shall not register or allow to operate on public streets or highways any medium-duty or heavy-duty vehicle that does not comply with the applicable requirements of the program established under paragraph (c) of this section. This shall not apply to the initial registration of a new motor vehicle.
- (e) After January 1, 1976, no owner of a medium-duty or heavy-duty vehicle shall operate or allow the operation of such vehicle that does not comply with the applicable requirements of the program established under paragraph (c) of this section. This shall not apply to the initial registration of a new motor vehicle.
- (f) The Commonwealth of Virginia shall submit, no later than February 1, 1974, a detailed compliance schedule showing the steps it will take to establish an inspection and maintenance program pursuant to paragraph (c) of this section.

(12.0) 52.2442

Bicycle lanes and bicycle storage facilities

(a) Definitions:

- (1) "Bicycle" means a two-wheel, non-motor powered vehicle.
- (2) "Bicycle lane" means a route for the exclusive use of bicycles, either constructed specifically for that purpose or converted from an existing lane.
- (3) "Bicycle parking facility" means any storage facility for bicycles, which allows bicycles to be locked securely.
- (4) "Parking space" means the area allocated by a parking facility for the temporary storage of one automobile.
- (5) "Parking facility" means a lot, garage, building, or portion thereof, in or on which motor vehicles are temporarily parked.

(b) This section shall be applicable in the Commonwealth of Virginia portion of the National Capital Interstate Air Quality Control Region.

(c) On or before July 1, 1976, the Commonwealth of Virginia shall establish a network of bicycle lanes linking residential areas with employment, educational, and commercial centers in accordance with the following requirements:

- (1) The network shall contain no less than 60 miles of bicycle lanes in addition to any in existence as of November 20, 1973.
- (2) Each bicycle lane shall at a minimum:
 - (i) Be clearly marked by signs indicating that the lane is for the exclusive use of bicycles (and pedestrians, if necessary);
 - (ii) Be separated from motor vehicle traffic by appropriate devices, such as physical barriers, pylons, or painted lines;
 - (iii) Be regularly maintained and repaired;
 - (iv) Be of a hard, smooth surface suitable for bicycles;
 - (v) Be at least 5 feet wide for one-way traffic, or 8 feet wide for two-way traffic;
 - (vi) If in a street used by motor vehicles, be a minimum of 8 feet wide whether one-way or two-way; and
 - (vii) Be adequately lighted.

- (3) Off-street bicycle lanes which are not reasonably suited for commuting to and from employment, educational, and commercial centers shall not be considered a part of this network.
- (4) On or before October 1, 1974, the Commonwealth of Virginia shall establish 25 percent of the total mileage of the bicycle lane network; on or before June 1, 1975, 50 percent of the total mileage shall be established; on or before July 1, 1976, 100 percent of the total mileage shall be established.
- (d) On or before June 1, 1974, the Commonwealth of Virginia shall submit to the Administrator a comprehensive study of a bicycle lane and bicycle path network. The study shall include, but not be limited to the following:
 - (1) A bicycle user and potential user survey, which shall at a minimum determine:
 - (i) For present bicycle riders, the origin, destination, frequency, travel time, and distance of bicycle trips;
 - (ii) In high density employment areas the present modes of transportation of employees and the potential modes of transportation, including the number of employees who would convert to the bicycle mode from other modes upon completion of the bicycle lane network described in paragraph (c) of this section.
 - (2) A determination of the feasibility and location of on-street bicycle lanes.
 - (3) A determination of the feasibility and location of off-street lanes.
 - (4) A determination of the special problems related to feeder lanes to bridges, on-bridge lanes, feeder lanes to METRO and railroad stations, and feeder lanes to fringe parking areas, and the means necessary to include such lanes in the bicycle lane network described in paragraph (c) of this section.
 - (5) A determination of the feasibility and location of various methods of safe bicycle parking.
 - (6) The study shall make provision for the receipt of public comments on any matter within the scope of the study, including the location of the bicycle lane network described in paragraph (c) of this section.
- (e) By June 1, 1974, in addition to the comprehensive study required pursuant to paragraph (d) of this section, the Commonwealth of Virginia

shall submit to the Administrator a detailed compliance schedule showing the steps it will take to establish this network pursuant to paragraphs (c) and (g) of this section. The compliance schedule shall identify in detail the names of streets that will provide bicycle lanes, and the location of any lanes to be constructed especially for bicycle use. It shall also include a statement indicating the source, amount, and adequacy of funds to be used in implementing this section, and the text of any needed statutory proposals and needed regulations which will be proposed for adoption.

- (f) On or before October 1, 1974, the Commonwealth of Virginia shall submit to the Administrator legally adopted regulations sufficient to implement and enforce all of the requirements of this section.
- (g) On or before June 1, 1975, the Commonwealth of Virginia shall require all owners and operators of parking facilities containing more than 50 parking spaces (including both free and commercial facilities) within the area specified in paragraph (b) of this section to provide spaces for the storage of bicycles in the following ratio: one automobile-size parking space (with a bicycle parking facility) for the storage of bicycles for every 75 parking spaces for the storage of autos. The Commonwealth shall also require that:
 - (1) Bicycle parking facilities shall be so located as to be safe from motor vehicle traffic and secure from theft. They shall be properly repaired and maintained.
 - (2) The METRO Subway System shall provide a sufficient number of safe and secure bicycle parking facilities at each station to meet the needs of its riders.
 - (3) All parking facilities owned, operated, or leased by the Federal Government shall be subject to this paragraph.
 - (4) Any owner or operator of a parking facility which charges a fee for the storage of motor vehicles shall store bicycles at a price per unit per hour which is no greater in relation to the cost of storing them than is the price of parking for a motor vehicle in relation to the cost of storing it. Unless the owner or operator makes an affirmative showing to the Commonwealth of Virginia of different facts, and agrees to charge in conformity with that showing, the ratio in costs and prices shall be determined by the maximum number of bicycles that can be stored in a single standard-sized automobile parking space.

(38 FR 33728, Dec. 6, 1973)

(12.0) 52.2443 Management of parking supply.

(a) Definitions:

All terms used in this section but not specifically defined below shall have the meaning given them in Part 51 of this chapter and this Part 52.

- (1) "Parking facility" (also called "facility") means a lot, garage, building or structure, or combination or portion thereof, in or on which motor vehicles are temporarily parked.
 - (2) "Vehicle trip" means a single movement by a motor vehicle that originates or terminates at a parking facility.
 - (3) "Construction" means fabrication, erection, or installation of a parking facility, or any conversion of land, a building or structure, or portion thereof, for use as a facility.
 - (4) "Modification" means any change to a parking facility that increases or may increase the motor vehicle capacity of or the motor vehicle activity associated with such parking facility.
 - (5) "Commence" means to undertake a continuous program of onsite construction or modification.
- (b) This regulation is applicable in the Virginia portion of the National Capital Air Quality Control Region.
- (c) The requirements of this section are applicable to the following parking facilities in the areas specified in paragraph (b) of this section, the construction or modification of which is commenced after January 1, 1975.
- (1) Any new parking facility with parking capacity for 250 or more motor vehicles;
 - (2) Any parking facility that will be modified to increase parking capacity by 250 or more vehicles; and
 - (3) Any parking facility constructed or modified in increments which individually are not subject to review under this section, but which, when all such increments occurring since January 1, 1975, are added together, as a total would subject the facility to review under this section.
- (d) No person shall commence construction or modification of any facility subject to this section without first obtaining written approval from the Administrator or an agency designated by him; provided, that this paragraph shall not apply to any proposed construction or modification for which a general construction contract was finally executed by all appropriate parties on or before January 1, 1975.
- (e) No approval to construct or modify a facility shall be granted unless

the applicant shows to the satisfaction of the Administrator or agency approved by him that:

- (1) The design or operation of the facility will not cause a violation of the control strategy which is part of the applicable implementation plan, and will be consistent with the plan's VMT reduction goals.
 - (2) The emissions resulting from the design or operation of the facility will not prevent or interfere with the attainment or maintenance of any national ambient air quality standard at any time within 10 years from the date of application.
- (f) All applications for approval under this section shall include the following information:
- (1) Name and address of the applicant.
 - (2) Location and description of the parking facility.
 - (3) A proposed construction schedule.
 - (4) The normal hours of operation of the facility and the enterprises and activities that it serves.
 - (5) The total motor vehicle capacity before and after the construction or modification of the facility.
 - (6) The number of people using or engaging in any enterprises or activities that the facility will serve on a daily basis and a peak hour basis.
 - (7) A projection of the geographic area in the community from which people and motor vehicles will be drawn to the facility. Such projection shall include data concerning the availability of mass transit from such areas.
 - (8) An estimate of the average and peak hour vehicle trip generation rates, before and after construction or modification of the facility.
 - (9) An estimate of the effect of the facility on traffic pattern and flow.
 - (10) An estimate of the effect of the facility on total VMT for the air quality control region.
 - (11) An analysis of the effect of the facility on site and regional air quality, including a showing that the facility will be compatible with the applicable implementation plan, and that the

facility will not cause any national air quality standard to be exceeded within 10 years from date of applicaiton. The Administrator may prescribe a standardized screening technique to be used in analyzing the effect of the facility on ambient air quality.

- (12) Additional information, plans, specifications, or documents required by the Administrator.
- (g) Each application shall be signed by the owner or operator of the facility, whose signature shall constitute an agreement that the facility shall be operated in accordance with the design submitted in the application and with applicable rules, regulations, and permit conditions.
- (h) Within 30 days after receipt of an application, the Administrator or agency approved by him shall notify the public, by prominent advertisement in the Region affected, of the receipt of the application and the proposed action on it (whether approval, conditional approval, or denial), and shall invite public comment.
- (1) The application, all submitted information, and the terms of the proposed action shall be made available to the public in a readily accessible place within the affected air quality region.
- (2) Public comments submitted within 30 days of the date such information is made available shall be considered in making the final decision on the application.
- (3) The Administrator or agency approved by him shall take final action (approval, conditional approval, or denial) on an application within 30 days after close of the public comment period.

(38 FR 31538, Nov. 15, 1973, as amended at 39 FR 1849, Jan. 15, 1974)

NOTE: The provisions of 52.2443 were suspended indefinitely at 40 FR 29714, July 15, 1975)

(12.0) 52.2444 Medium duty air/fuel control retrofit.

(a) Definitions:

- (1) "Air/Fuel Control Retrofit" means a system or device (such as modification to the engine's carburetor or positive crankcase ventilation system) that results in engine operation at an increased air-fuel ratio so as to achieve reductions in exhaust emissions of hydrocarbon and carbon monoxide from 1973 and earlier medium-duty vehicles of at least 15 and 30 percent, respectively.

- (2) "Medium-duty vehicle" means a gasoline powered motor vehicle rated at more than 6,000 lb. GVW and less than 10,000 lb. GVW.
- (3) All other terms used in this section that are defined in Part 51, Appendix N, of this chapter are used herein with meanings so defined.
- (b) This section is applicable within the Virginia portion of the National Capital Interstate AQCR.
- (c) The Commonwealth of Virginia shall establish a retrofit program to ensure that on or before May 31, 1976, all medium-duty vehicles of model years prior to 1973 which are not required to be retrofitted with an oxidizing catalyst or other approved device pursuant to 52.2446, which are registered in the area specified in paragraph (b) of this section, are equipped with an appropriate Air/Fuel Control device or other device as approved by the Administrator that will reduce exhaust emissions of hydrocarbon and carbon monoxide to the same extent as an air/fuel control device. No later than February 1, 1974, the Commonwealth of Virginia shall submit to the Administrator a detailed compliance schedule showing the steps it will take to establish and enforce a retrofit program pursuant to this section, including the text of statutory proposals, regulations, and enforcement procedures that the Commonwealth proposes for adoption. The compliance schedule shall also include a date by which the Commonwealth shall evaluate and approve devices for use in this program. Such date shall be no later than September 30, 1974.
- (d) No later than April 1, 1974, the Commonwealth shall submit legally adopted regulations to the Administrator establishing such a program. The regulations shall include:
 - (1) Designation of an agency responsible for evaluating and approving devices for use on vehicles subject to this section.
 - (2) Designation of an agency responsible for ensuring that the provisions of paragraph (d)(3) of this section are enforced.
 - (3) Provisions for beginning the installation of the devices by August 1, 1975, and completing the installation of the devices on all vehicles subject to this section no later than May 31, 1976.
 - (4) A provision that no later than May 31, 1976, no vehicle for which retrofit is required under this section shall pass the annual emission tests provided for by 52.2441 unless it has been first equipped with an approved air/fuel control device, or other device approved pursuant to this section, which the test has shown to be installed and operating correctly. The regulations shall include test procedures and failure criteria for implementing

this provision.

- (5) Methods and procedures for ensuring that those persons installing the retrofit device have the training and ability to perform the needed tasks satisfactorily and have an adequate supply of retrofit components.
- (6) Provision (apart from the requirements of any general program for periodic inspection and maintenance of vehicles) for emissions testing at the time of device installation or some other positive assurance that the device is installed and operating correctly.
- (e) After May 31, 1976, the Commonwealth shall not register or allow to operate on its streets or highways any vehicle that does not comply with the applicable standards and procedures adopted pursuant to paragraph (d) of this section.
- (f) After May 31, 1976, no owner of a vehicle subject to this section shall operate or allow the operation of any such vehicle that does not comply with the applicable standards and procedures implemented by this section.
- (g) The Commonwealth may exempt any class or category of vehicles from this section which the Commonwealth finds is rarely used on public streets and highways (such as classic or antique vehicles) or for which the Commonwealth demonstrates to the Administrator that air/fuel control devices or other devices approved pursuant to this section are not commercially available.

(38 FR 33729, Dec. 6, 1973)

(12.0) 52.2445

Heavy duty air/fuel control retrofit.

(a) Definitions:

- (1) "Air/Fuel Control Retrofit" means a system or device such as modification to the engine's carburetor or positive crank case ventilation system) that results in engine operation at an increased air/fuel ratio so as to achieve reduction in exhaust emissions of hydrocarbon and carbon monoxide from heavy-duty vehicles of at least 30 and 40 percent, respectively.
- (2) "Heavy duty vehicle" means a gasoline-powered motor vehicle rated at 10,000 lb. gross vehicle weight or more.
- (3) All other terms used in this section that are defined in Part 51, Appendix N, of this chapter are used herein with meanings so defined.

- (b) This section is applicable within the Virginia portion of the National Capital Interstate AQCR.
- (c) The Commonwealth of Virginia shall establish a retrofit program to ensure that on or before May 31, 1977, all heavy duty vehicles registered in the area specified in paragraph (b) of this section are equipped with an appropriate air/fuel control device or other device as approved by the Administrator that will reduce exhaust emissions of hydrocarbons and carbon monoxide to the same extent as an air/fuel control device. No later than April 1, 1974, the Commonwealth of Virginia shall submit to the administrator a detailed compliance schedule showing the steps it will take to establish and enforce a retrofit program pursuant to this section, including the text of statutory proposals, regulations, and enforcement procedures that the Commonwealth shall evaluate and approve devices for use in this program. Such date shall be no later than January 1, 1975.
- (d) No later than September 1, 1974, the Commonwealth shall submit legally adopted regulations to the Administrator establishing such a program. The regulations shall include:
 - (1) Designation of an agency responsible for evaluating and approving devices for use on vehicles subject to this section.
 - (2) Designation of an agency responsible for ensuring that the provisions of paragraph (d)(3) of this section are enforced.
 - (3) Provisions for beginning the installation of the retrofit devices by January 1, 1976, and completing the installation of the devices on all vehicles subject to this section no later than May 31, 1977.
 - (4) A provision that starting no later than May 31, 1977, no vehicle for which retrofit is required under this section shall pass the annual emission tests provided for by 52.2441 unless it has been first equipped with an approved air/fuel control device, or other device approved pursuant to this section, which the test has shown to be installed and operating correctly. The regulations shall include test procedures and failure criteria for implementing this provision.
 - (5) Methods and procedures for ensuring that those installing the retrofit devices have the training and ability to perform the needed tasks satisfactorily and have an adequate supply of retrofit components.
 - (6) Provision (apart from the requirements of any general program for periodic inspection and maintenance of vehicles) for emissions testing at the time of device installation or some other positive assurance that the device is installed and operating

correctly

- (g) The Commonwealth may exempt any class or category of vehicles from this section which the Commonwealth finds is rarely used on public streets and highways (such as classic or antique vehicles) or for which the Commonwealth demonstrates to the Administrator that air/fuel control device or other devices approved pursuant to this section are not commercially available.

(38 FR 33729 Dec. 6, 1973)

(12.0) 52.2446 Oxidizing catalyst retrofit.

(a) Definitions:

- (1) "Oxidizing catalyst" means a device that uses a catalyst installed in the exhaust system of a vehicle (and if necessary includes an air pump) so as to achieve reduction in exhaust emissions of hydrocarbon and carbon monoxide of at least 50 and 50 percent, respectively, from light duty vehicles of 1971 through 1975 model years, and of at least 50 to 50 percent, respectively, from medium duty vehicles of 1971 through 1975 model years.
 - (2) "Light-duty vehicle" means a gasoline-powered motor vehicle rated at 6,000 lb. gross vehicle weight (GVW) or less.
 - (3) "Medium-duty vehicle" means a gasoline-powered motor vehicle rated at more than 6,000 lb. GVW and less than 10,000 lb. GVW.
 - (4) "Fleet vehicle" means any of 5 or more light-duty vehicles operated by the same person(s), business, or governmental entity and used principally in connection with the same or related occupations or uses. This definition shall also include any taxicab (or other light-duty vehicle-for-hire) owned by any individual or business.
 - (5) All other terms used in this section that are defined in Part 51, Appendix N, are used herein with meanings so defined.
- (b) This section is applicable withing the Virginia portion of the National Capital Interstate AQCR.
- (c) The Commonwealth of Virginia shall establish a retrofit program to ensure that on or before May 31, 1977, all light-duty fleet vehicles of model years 1971 through 1975 and medium-duty vehicles of model years 1971 through 1975 which are registered in the area specified in paragraph (b) of this section and are able to operate on 91 RON gasoline, are equipped with an appropriate oxidizing catalyst retrofit device or other device, as approved by the Administrator, that will

reduce exhaust emissions of hydrocarbons and carbon monoxide to the same extent as an oxidizing catalyst retrofit device. No later than April 1, 1974, the Commonwealth of Virginia shall submit to the Administrator a detailed compliance schedule showing the steps it will take to establish and enforce a retrofit program pursuant to this section, including the text of statutory proposals, regulations, and enforcement procedures that the Commonwealth proposes for adoption. The compliance schedule shall also include a date by which the Commonwealth shall evaluate and approve devices for use in this program. Such date shall be no later than January 1, 1975.

- (d) No later than September 1, 1974, the Commonwealth shall submit legally adopted regulations to the Administrator establishing such a program. The regulation shall include:
 - (1) Designation of an agency responsible for evaluating and approving devices for use on vehicles subject to this section.
 - (2) Designation of an agency responsible for ensuring that the provisions of paragraph (d)(3) of this section are enforced.
 - (3) Provisions for beginning the installation of the retrofit devices by January 1, 1976, and completing the installation of the devices on all vehicles subject to this section no later than May 31, 1977.
 - (4) A provision that starting no later than May 31, 1977, no vehicle for which retrofit is required under this section shall pass the annual emission test provided for by 52.2423 and 52.2441 unless it has been first equipped with an approved oxidizing catalyst device, or other device approved pursuant to this section, which the test has shown to be installed and operating correctly. The regulations shall include test procedures and failure criteria for implementing this provision.
 - (5) Methods and procedures for ensuring that those installing the retrofit devices have the training and ability to perform the needed tasks satisfactorily and have an adequate supply of retrofit components.
 - (6) Provision (apart from the requirements of any general program for periodic inspection and maintenance of vehicles) for emissions testing at the time of device installation or some other positive assurance that the device is installed and operating correctly.
- (e) After May 31, 1977, the Commonwealth shall not register or allow to operate on its streets or highways any vehicle that does not comply with the applicable standards and procedures adopted pursuant to paragraph (d) of this section.

- (f) After May 31, 1977, no owner of a vehicle subject to this section shall operate or allow the operation of any such vehicle that does not comply with the applicable standards and procedures implementing this section.
- (g) Any vehicle which is manufactured equipped with an oxidizing catalyst, or which is certified to meet the original 1975 light-duty vehicle emission standards set forth in section 202(b)(1)(A) of the Clean Air Act of 1970 (without regard to any suspension of such standards), shall be exempt from the requirements of this section.

(38 FR 33729, Dec. 6, 1973)

(12.0) 52.2447 Vacuum spark advance disconnect retrofit.

(a) Definitions:

- (1) "Vacuum spark advance disconnect retrofit" means a device or system installed on a motor vehicle that prevents the ignition vacuum advance from operating either when the vehicle's transmission is in the lower gears, or when the vehicle is traveling below a predetermined speed so as to achieve reduction in exhaust emissions of hydrocarbon and carbon monoxide from 1967 and earlier light-duty vehicles of at least 25 and 9 percent, respectively.
 - (2) "Light-duty vehicle" means a gasoline-powered motor vehicle rated at 6,000 lb. gross vehicle weight (GVW) or less.
 - (3) All other terms used in this section that are defined in Part 51, Appendix N, are used herein with meanings so defined.
- (b) This section is applicable within the Virginia portion of the National Capital Interstate AQCR.
- (c) The Commonwealth of Virginia shall establish a retrofit program to ensure that on or before January 1, 1976, all light-duty vehicles of model years prior to 1968 registered in the area specified in paragraph (b) of this section are equipped with an appropriate vacuum spark advance disconnect retrofit device or other device, as approved by the Administrator, that will reduce exhaust emissions of hydrocarbons and carbon monoxide to the same extent as a vacuum spark advance disconnect retrofit. No later than February 1, 1974, the Commonwealth of Virginia shall submit to the Administrator a detailed compliance schedule showing the steps it will take to establish and enforce a retrofit program pursuant to this section, including the text of statutory proposals, regulations, and enforcement procedures that the Commonwealth proposes for adoption. The compliance schedule shall also include a date by which the Commonwealth shall evaluate and approve devices for use in this program. Such date shall be no

later than September 30, 1974.

- (d) No later than April 1, 1974, the Commonwealth shall submit legally adopted regulations to the Administrator establishing such a program. The regulations shall include:
 - (1) Designation of an agency responsible for evaluating and approving devices for use on vehicles subject to this section.
 - (2) Designation of an agency responsible for ensuring that the provisions of paragraph (d)(3) of this section are enforced.
 - (3) Provisions for beginning the installation of the retrofit devices by January 1, 1975, and completing the installation of the devices on all vehicles subject to this section no later than January 1, 1976.
 - (4) A provision that starting no later than January 1, 1976, no vehicle for which retrofit is required under this section shall pass the annual emission tests provided for by 52.2423 unless it has been first equipped with an approved vacuum spark advance disconnect retrofit device, or other device approved pursuant to this section, which the test has shown to be installed and operating correctly. The regulations shall include test procedures and failure criteria for implementing this provision.
 - (5) Methods and procedures for ensuring that those installing the retrofit devices have the training and ability to perform the needed tasks satisfactorily and have an adequate supply of retrofit components.
 - (6) Provision (apart from the requirements of any general program for periodic inspection and maintenance of vehicles) for emissions testing at the time of device installation, or some other positive assurance that the device is installed and operating correctly.
- (e) After January 1, 1976, the Commonwealth shall not register or allow to operate on its streets or highways any light-duty vehicle that does not comply with the applicable standards and procedures adopted pursuant to paragraph (d) of this section.
- (f) After January 1, 1976, no owner of a vehicle subject to this section shall operate or allow the operation of any such vehicle that does not comply with the applicable standards and procedures implementing this section.
- (g) The Commonwealth may exempt any class or category of vehicles from this section which the Commonwealth finds is rarely used on public streets and highways (such as classic or antique vehicles) or for

which the Commonwealth demonstrates to the Administrator that vacuum spark advance disconnect devices or other devices approved pursuant to this section are not commercially available.

(38 FR 33730, Dec. 6, 1973)

(b) Regulation for Review of New or Modified Indirect Sources

(1) All terms used in this paragraph but not specifically defined below shall have the meaning given them in 52.01 of this chapter.

- (i) The term "indirect source" means a facility, building, structure, or installation which attracts or may attract mobile source activity that results in emissions of a pollutant for which there is a national standard. Such indirect sources include, but are not limited to:
 - (a) Highways and roads.
 - (b) Parking facilities.
 - (c) Retail, commercial and industrial facilities.
 - (d) Recreation, amusement, sports and entertainment facilities.
 - (e) Airports.
 - (f) Office and Government buildings.
 - (g) Apartment and condominium buildings.
 - (h) Education facilities.
- (ii) The term "Administrator" means the Administrator of the Environmental Protection Agency or his designated agent.
- (iii) The term "associated parking area" means a parking facility or facilities owned and/or operated in conjunction with an indirect source.
- (iv) The term "aircraft operation" means an aircraft take-off or landing.
- (v) The phrase "to commence construction" means to engage in a continuous program of on-site construction including site clearance, grading, dredging, or land filling specifically designed for an indirect source in preparation for the fabrication, erection, or installation of the building components of the indirect source. For the purpose of this paragraph, interruptions resulting from acts of God, strikes, litigation, or other matters beyond the control of the owner shall be disregarded in determining whether a construction or modification program is continuous.

- (vi) The phrase "to commence modification" means to engage in a continuous program of on-site modification, including site clearance, grading, dredging, or land filling in preparation for specific modification of the indirect source.
 - (vii) The term "highway section" means the development proposal of a highway of substantial length between logical termini (major crossroads, population centers, major traffic generators, or similar major highway control elements) as normally included in a single location study or multi-year highway improvement program as set forth in 23 CFR 770.201 (38 FR 31677).
 - (viii) The term "highway project" means all or a portion of a highway section which would result in a specific construction contract.
 - (ix) The term "Standard Metropolitan Statistical Area (SMSA)" means such areas as designated by the U.S. Bureau of the Budget in the following publication: "Standard Metropolitan Statistical Area," issued in 1967, with subsequent amendments.
- (2) The requirements of this paragraph are applicable to the following:
- (i) In an SMSA:
 - (a) Any new parking facility or other new indirect source with an associated parking area, which has a new parking capacity of 1,000 cars or more; or
 - (b) Any modified parking facility, or any modification of an associated parking area, which increases parking capacity by 500 cars or more; or
 - (c) Any new highway project with an anticipated average annual daily traffic volume of 20,000 or more vehicles per day within ten years of construction; or
 - (d) Any modified highway project which will increase average annual daily traffic volume by 10,000 or more vehicles per day within ten years after modification.
 - (ii) Outside an SMSA:
 - (a) Any new parking facility, or other new indirect source with an associated parking area, which has a parking capacity of 2,000 cars or more; or

- (b) Any modified parking facility, or any modification of an associated parking area, which increases parking capacity by 1,000 cars or more.
 - (iii) Any airport, the construction or general modification program of which is expected to result in the following activity within ten years of construction or modification:
 - (a) New airport: 50,000 or more operations per year by regularly scheduled air carriers, or use by 1,600,000 or more passengers per year.
 - (b) Modified airport: Increase of 50,000 or more operations per year by regularly scheduled air carriers over the existing volume of operations, or increase of 1,600,000 or more passengers per year.
 - (iv) Where an indirect source is constructed or modified in increments which individually are not subject to review under this paragraph, and which are not part of a program of construction or modification in planned incremental phases approved by the Administrator, all such increments commenced after December 31, 1974, or after the latest approval hereunder, whichever date is most recent, shall be added together for determining the applicability of this paragraph.
- (3) No owner or operator of an indirect source subject to this paragraph shall commence construction or modification of such source after December 31, 1974, without first obtaining approval from the Administrator. Application for approval to construct or modify shall be by means prescribed by the Administrator, and shall include a copy of any draft or final environmental impact statement which has been prepared pursuant to the National Environmental Policy Act (42 U.S.C. 4321). If not included in such environmental impact statement, the Administrator may request the following information:
- (i) For all indirect sources subject to this paragraph, other than highway projects:
 - (a) The name and address of the applicant.
 - (b) A map showing the location of the site of indirect source and the topography of the area.
 - (c) A description of the proposed use of the site, including the normal hours of operation of the facility, and the general types of activities to be operated therein.

- (d) A site plan showing the location of associated parking areas, points of motor vehicle ingress and egress to and from the site and its associated parking areas, and the location and height of buildings on the site.
- (e) An identification of the principal roads, highways, and intersections that will be used by motor vehicles moving to or from the indirect source.
- (f) An estimate, as of the first year after the date the indirect source will be substantially complete and operational, of the average daily traffic volumes, maximum traffic volumes for one-hour and eight-hour periods, and vehicle capacities of the principal roads, highways, and intersections identified pursuant to subdivision (i) (e) of this subparagraph located within one-fourth mile of all boundaries of the site.
- (g) Availability of existing and projected mass transit to service the site.
- (h) Where approval is sought for indirect sources to be constructed in incremental phases, the information required by this subparagraph (3) shall be submitted for each phase of the construction project.
- (i) Any additional information or documentation that the Administrator deems necessary to determine the air quality impact of the indirect source, including the submission of measured air quality data at the proposed site prior to construction or modification.

(ii) For airports:

- (a) An estimate of the average number and maximum number of aircraft operations per day by type of aircraft during the first, fifth and tenth years after the date of expected completion.
- (b) A description of the commercial, industrial, residential and other development that the applicant expects will occur within three miles of the perimeter of the airport within the first five and the first ten years after the date of expected completion.
- (c) Expected passenger loadings at the airport.
- (d) The information required under subdivisions (i) (a) through (i) of this subparagraph.

(iii) For highway projects:

- (a) A description of the average and maximum traffic volumes for one, eight, and 24-hour time periods expected within 10 years of date of expected completion.
- (b) An estimate of vehicle speeds for average and maximum traffic volume conditions and the vehicle capacity of the highway project.
- (c) A map showing the location of the highway project, including the location of buildings along the right-of-way.
- (d) A description of the general features of the highway project and associated right-of-way, including the approximate height of buildings adjacent to the highway.
- (e) Any additional information or documentation that the Administrator deems necessary to determine the air quality impact of the indirect source, including the submission of measured air quality data at the proposed site prior to construction or modification.

(iv) For indirect sources other than airports and those highway projects subject to the provisions of paragraph (b) (6) (iii) of this section, the air quality monitoring requirements of paragraph (b) (3) (i) (i) of this section shall be limited to carbon monoxide, and shall be conducted for a period of not more than 14 days.

(4) (i) For indirect sources other than highway projects and airports, the Administrator shall not approve an application to construct or modify if he determines that the indirect source will:

- (a) Cause a violation of the control strategy of any applicable state implementation plan; or
- (b) Cause or exacerbate a violation of the national standards for carbon monoxide in any region or portion thereof.

(ii) The Administrator shall make the determination pursuant to paragraph (b) (4) (i) (b) of this section by evaluating the anticipated concentration of carbon monoxide at reasonable receptor or exposure sites which will be affected by the mobile source activity expected to be attracted by the indirect source. Such determination may be made by using traffic flow characteristic guidelines

published by the Environmental Protection Agency which relate traffic demand and capacity considerations to ambient carbon monoxide impact, by use of appropriate atmospheric diffusion models (examples of which are referenced in Appendix O to Part 51 of this chapter), and/or by any other reliable analytic method. The applicant may (but need not) submit with his application, the results of an appropriate diffusion model and/or any other reliable analytic method, along with the technical data and information supporting such results. Any such results and supporting data submitted by the applicant shall be considered by the Administrator in making his determination pursuant to paragraph (b) (4) (i) (b) of this section.

- (5) (i) For airports subject to this paragraph, the Administrator shall base his decision on the approval or disapproval of an application on the considerations to be published as an Appendix to this Part.
- (ii) For highway projects and parking facilities specified under paragraph (b) (2) of this section which are associated with airports, the requirements and procedures specified in paragraphs (b) (4) and (6) (i) and (ii) of this section shall be met.
- (6) (i) For all highway projects subject to this paragraph, the Administrator shall not approve an application to construct or modify if he determines that the indirect source will:
 - (a) Cause a violation of the control strategy of any applicable state implementation plan; or
 - (b) Cause or exacerbate a violation of the national standards for carbon monoxide in any region or portion thereof.
- (ii) The determination pursuant to paragraph (b) (6) (i) (b) of this section shall be made by evaluating the anticipated concentration of carbon monoxide at reasonable receptor or exposure sites which will be affected by the mobile source activity expected on the highway for the ten year period following the expected date of completion according to the procedures specified in paragraph (b) (4) (ii) of this section.
- (iii) For new highway projects subject to this paragraph with an anticipated average daily traffic volume of 50,000 or more vehicles within ten years of construction, or modifications to highway projects subject to this paragraph which will increase average daily traffic volume by 25,000

or more vehicles within ten years after modification, the Administrator's decision on the approval or disapproval of an application shall be based on the considerations to be published as an Appendix to this Part in addition to the requirements of paragraph (b) (6) (i) of this section.

- (7) The determination of the air quality impact of a proposed indirect source "at reasonable receptor or exposure sites", shall mean such locations where people might reasonably be exposed for time periods consistent with the national ambient air quality standards for the pollutants specified for analysis pursuant to this paragraph.
- (8) (i) Within 20 days after receipt of an application or addition thereto, the Administrator shall advise the owner or operator of any deficiency in the information submitted in support of the application. In the event of such a deficiency, the date of receipt of the application for the purpose of paragraph (b) (8) (ii) of this section shall be the date on which all required information is received by the Administrator.
- (ii) Within 30 days after receipt of a complete application, the Administrator shall:
 - (a) Make a preliminary determination whether the indirect source should be approved, approved with conditions in accordance with paragraphs (b) (9) or (10) of this section, or disapproved.
 - (b) Make available in at least one location in each region in which the proposed indirect source would be constructed, a copy of all materials submitted by the owner or operator, a copy of the Administrator's preliminary determination, and a copy or summary of other materials, if any, considered by the Administrator in making his preliminary determination; and
 - (c) Notify the public, by prominent advertisement in a newspaper of general circulation in each region in which the proposed indirect source would be constructed, of the opportunity for written public comment on the information submitted by the owner or operator and the Administrator's preliminary determination on the approvability of the indirect source.
- (iii) A copy of the notice required pursuant to this subparagraph shall be sent to the applicant and to officials and agencies having cognizance over the location where the indirect source will be situated, as follows: State and local air pollution control agencies, the chief executive of the city and county; any comprehensive regional

land use planning agency; and for highways, any local board or committee charged with responsibility for activities in the conduct of the urban transportation planning process (3-C process) pursuant to 23 U.S.C. 134.

- (iv) Public comments submitted in writing within 30 days after the date such information is made available shall be considered by the Administrator in making his final decision on the application. No later than 10 days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Administrator shall consider the applicant's response in making his final decision. All comments shall be made available for public inspection in at least one location in the region in which the indirect source would be located.
 - (v) The Administrator shall take final action on an application within 30 days after the close of the public comment period. The Administrator shall notify the applicant in writing of his approval, conditional approval, or denial of the application, and shall set forth his reasons for conditional approval or denial. Such notification shall be made available for public inspection in at least one location in the region in which the indirect source would be located.
 - (vi) The Administrator may extend each of the time periods specified in paragraphs (b) (8) (ii), (iv), or (v) of this section by no more than 30 days, or such other period as agreed to by the applicant and the Administrator.
- (9) (i) Whenever an indirect source as proposed by an owner or operator's application would not be permitted to be constructed for failure to meet the tests set forth pursuant to paragraphs (b) (4) (i), (b) (5) (i), or (b) (6) (i) and (iii) of this section, the Administrator may impose reasonable conditions on an approval related to the air quality aspects of the proposed indirect source so that such source, if constructed or modified in accordance with such conditions, could meet the tests set forth pursuant to paragraphs (b) (4) (i), (b) (5) (i), or (b) (6) (i) and (iii) of this section. Such conditions may include, but not be limited to:
- (a) Binding commitments to roadway improvements or additional mass transit facilities to serve the indirect source secured by the owner or operator from governmental agencies having jurisdiction thereof;
 - (b) Binding commitments by the owner or operator to specific programs for mass transit incentives for employees and patrons of the source; and

- (c) Binding commitments by the owner or operator to construct, modify, or operate the indirect source in such a manner as may be necessary to achieve the traffic flow characteristics published by the Environmental Protection Agency pursuant to paragraph (b) (4) (ii) of this section.
- (ii) The Administrator may specify that any items of information provided in an application for approval related to the operation of an indirect source which may affect the source's air quality impact shall be considered permit conditions.
- (10) Notwithstanding the provisions relating to modified indirect sources contained in paragraph (b) (2) of this section, the Administrator may condition any approval by reducing the extent to which the indirect source may be further modified without resubmission for approval under this paragraph.
- (11) Any owner or operator who fails to construct an indirect source in accordance with the application as approved by the Administrator; any owner or operator who fails to construct and operate an indirect source in accordance with conditions imposed by the Administrator under paragraph (b) (9) of this section; any owner or operator who modifies an indirect source in violation of conditions imposed by the Administrator under paragraph (b) (10) of this section; or any owner or operator of an indirect source subject to this paragraph who commences construction or modification thereof after December 31, 1974, without applying for and receiving approval hereunder, shall be subject to the penalties specified under section 113 of the Act and shall be considered in violation of an emission standard or limitation under section 304 of the Act. Subsequent modification to an approved indirect source may be made without applying for permission pursuant to this paragraph only where such modification would not violate any condition imposed pursuant to paragraphs (b) (9) and (10) of this section and would not be subject to the modification criteria set forth in paragraph (b) (2) of this section.
- (12) Approval to construct or modify shall become invalid if construction or modification is not commenced within 24 months after receipt of such approval. The Administrator may extend such time period upon satisfactory showing that an extension is justified. The applicant may apply for such an extension at the time of initial application or at any time thereafter.
- (13) Approval to construct or modify shall not relieve any owner or operator of the responsibility to comply with the control strategy and all local, State and Federal regulations which are part of the applicable State implementation plan.

- (14) Where the Administrator delegates the responsibility for implementing the procedures for conducting indirect source review pursuant to this paragraph to any agency, other than a regional office of the Environmental Protection Agency, the following provisions shall apply:
- (i) Where the agency designated is not an air pollution control agency, such agency shall consult the appropriate State or local air pollution control agency prior to making any determination required by paragraphs (b) (4), (5), or (6) of this section. Similarly, where the agency designated does not have continuing responsibilities for land use planning, such agency shall consult with the appropriate State or local land use and transportation planning agency prior to making any determination required by paragraph (b) (9) of this section.
 - (ii) The Administrator of the Environmental Protection Agency shall conduct the indirect source review pursuant to this paragraph for any indirect source owned or operated by the United States Government.
 - (iii) A copy of the notice required pursuant to paragraph (b) (8) (ii) (c) of this section shall be sent to the Administrator through the appropriate Regional Office.
- (15) In any area in which a "management of parking supply" regulation which has been promulgated by the Administrator is in effect, indirect sources which are subject to review under the terms of such a regulation shall not be required to seek review under this paragraph but instead shall be required to seek review pursuant to such management of parking supply regulation. For purposes of this paragraph, a "management of parking supply" regulation shall be any regulation promulgated by the Administrator as part of a transportation control plan pursuant to the Clean Air Act which requires that any new or modified facility containing a given number of parking spaces shall receive a permit or other prior approval, issuance of which is to be conditioned on air quality considerations.
- (16) Notwithstanding any of the foregoing provisions to the contrary, the operation of this paragraph is hereby suspended pending further notice. No facility which commences construction prior to the expiration of the sixth month after the operation of this paragraph is reinstated (as to that type of facility) shall be subject to this paragraph.

(37 FR 10846, May 31, 1972 as amended at 40 FR 28065, July 3, 1975; 40 FR 40160, Sept. 2, 1975)

(17.0) 52.2451 Prevention of Significant Deterioration

(b) Definitions. For the purposes of this section:

- (1) "Facility" means an identifiable piece of process equipment. A stationary source is composed of one or more pollutant-emitting facilities.
- (2) The phrase "Administrator" means the Administrator of the Environmental Protection Agency or his designated representative.
- (3) The phrase "Federal Land Manager" means the head, or his designated representative, of any Department or Agency of the Federal Government which administers federally-owned land, including public domain lands.
- (4) The phrase "Indian Reservation" means any federally-recognized reservation established by Treaty, Agreement, Executive Order, or Act of Congress.
- (5) The phrase "Indian Governing Body" means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.
- (6) "Construction" means fabrication, erection or installation of a stationary source.
- (7) "Commenced" means that an owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.

(c) Area designation and deterioration increment

- (1) The provisions of this paragraph have been incorporated by reference into the applicable implementation plans for various States, as provided in Subparts B through DDD of this part. Where this paragraph is so incorporated, the provisions shall also be applicable to all lands owned by the Federal Government and Indian Reservations located in such State. The provisions of this paragraph do not apply in those counties or other functionally equivalent areas that pervasively exceeded any national ambient air quality standards during 1974 for sulfur dioxide or particulate matter and then only with respect to such pollutants. States may notify the Administrator at any time of those areas which exceeded the national standards during 1974 and therefore are exempt from the requirements of this paragraph.

- (2) (i) For purposes of this paragraph, areas designated as Class I or II shall be limited to the following increases in pollutant concentration occurring since January 1, 1975:

Area Designations		
Pollutant	Class I (ug/m ³)	Class II (ug/m ³)
Particulate matter:		
Annual geometric mean	5	10
24-hr maximum	10	30
Sulfur dioxide:		
Annual arithmetic mean	2	15
24-hr maximum	5	100
3-hr maximum	25	700

- (ii) For purposes of this paragraph, areas designated as Class III shall be limited to concentrations of particulate matter and sulfur dioxide no greater than the national ambient air quality standards.
- (iii) The air quality impact of sources granted approval to construct or modify prior to January 1, 1975 (pursuant to the approved new source review procedures in the plan) but not yet operating prior to January 1, 1975, shall not be counted against the air quality increments specified in paragraph (c) (2) (i) of this section.
- (3) (i) All areas are designated Class II as of the effective date of this paragraph. Redesignation may be proposed by the respective States, Federal Land Manager, or Indian Governing Bodies, as provided below, subject to approval by the Administrator.
- (ii) The State may submit to the Administrator a proposal to redesignate areas of the State Class I, Class II, or Class III, provided that:
- (a) At least one public hearing is held in or near the area affected and this public hearing is held in accordance with procedures established in 51.4 of this chapter, and
- (b) Other States, Indian Governing Bodies, and Federal Land Managers whose lands may be affected by the proposed redesignation are notified at least 30 days prior to the public hearing, and

- (c) A discussion of the reasons for the proposed redesignation is available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing contains appropriate notification of the availability of such discussion, and
 - (d) The proposed redesignation is based on the record of the State's hearing, which must reflect the basis for the proposed redesignation, including consideration of (1) growth anticipated in the area, (2) the social, environmental, and economic effects of such redesignation upon the area being proposed for redesignation and upon other areas and States, and (3) any impacts of such proposed redesignation upon regional or national interests.
 - (e) The redesignation is proposed after consultation with the elected leadership of local and other sub-state general purpose governments in the area covered by the proposed redesignation.
- (iii) Except as provided in paragraph (c) (3) (iv) of this section, a State in which lands owned by the Federal Government are located may submit to the Administrator a proposal to redesignate such lands Class I, Class II, or Class III in accordance with subdivision (ii) of this subparagraph provided that:
- (a) The redesignation is consistent with adjacent State and privately owned land, and
 - (b) Such redesignation is proposed after consultation with the Federal Land Manager.
- (iv) Notwithstanding subdivision (iii) of this subparagraph, the Federal Land Manager may submit to the Administrator a proposal to redesignate any Federal lands to a more restrictive designation than would otherwise be applicable provided that:
- (a) The Federal Land Manager follows procedures equivalent to those required of States under paragraph (c) (3) (ii) and,
 - (b) Such redesignation is proposed after consultation with the State(s) in which the Federal Land is located or which border the Federal Land.
- (v) Nothing in this section is intended to convey authority to the States over Indian Reservations where States have not assumed such authority under other laws nor is it intended to deny jurisdiction which States have assumed

under other laws. Where a State has not assumed jurisdiction over an Indian Reservation the appropriate Indian Governing Body may submit to the Administrator a proposal to redesignate areas Class I, Class II, or Class III, provided that:

- (a) The Indian Governing Body follows procedures equivalent to those required of States under paragraph (c) (3) (ii) and,
 - (b) Such redesignation is proposed after consultation with the State(s) in which the Indian Reservation is located or which border the Indian Reservation and, for those lands held in trust, with the approval of the Secretary of the Interior.
- (vi) The Administrator shall approve, within 90 days, any redesignation proposed pursuant to this subparagraph as follows:
- (a) Any redesignation proposed pursuant to subdivisions (ii) and (iii) of this subparagraph shall be approved unless the Administrator determines (1) that the requirements of subdivisions (ii) and (iii) of this subparagraph have not been complied with, (2) that the State has arbitrarily and capriciously disregarded relevant considerations set forth in subparagraph (3) (ii) (d) of this paragraph, or (3) that the State has not requested and received delegation of responsibility for carrying out the new source review requirements of paragraphs (d) and (e) of this section.
 - (b) Any redesignation proposed pursuant to subdivision (iv) of this subparagraph shall be approved unless he determines (1) that the requirements of subdivision (iv) of this subparagraph have not been complied with, or (2) that the Federal Land Manager has arbitrarily and capriciously disregarded relevant considerations set forth in subparagraph (3) (ii) (d) of this paragraph.
 - (c) Any redesignation submitted pursuant to subdivision (v) of this subparagraph shall be approved unless he determines (1) that the requirements of subdivision (v) of this subparagraph have not been complied with, or (2) that the Indian Governing Body has arbitrarily and capriciously disregarded relevant considerations set forth in subparagraph (3) (ii) (d) of this paragraph.

- (d) Any redesignation proposed pursuant to this paragraph shall be approved only after the Administrator has solicited written comments from affected Federal agencies and Indian Governing Bodies and from the public on the proposal.
 - (e) Any proposed redesignation protested to the proposing State, Indian Governing Body, or Federal Land Manager and to the Administrator by another State or Indian Governing Body because of the effects upon such protesting State or Indian Reservation shall be approved by the Administrator only if he determines that in his judgment the redesignation appropriately balances considerations of growth anticipated in the area proposed to be redesignated; the social, environmental and economic effects of such redesignation upon the area being redesignated and upon other areas and States; and any impacts upon regional or national interests.
 - (f) The requirements of paragraph (c) (3) (vi) (a) (3) that a State request and receive delegation of the new source review requirements of this section as a condition to approval of a proposed redesignation, shall include as a minimum receiving the administrative and technical functions of the new source review. The Administrator will carry out any required enforcement action in cases where the State does not have adequate legal authority to initiate such actions. The Administrator may waive the requirements of paragraph (c) (3) (vi) (a) (3) if the State Attorney-General has determined that the State cannot accept delegation of the administrative/technical functions.
 - (vii) If the Administrator disapproves any proposed area designation under this subparagraph, the State, Federal Land Manager or Indian Governing Body, as appropriate, may re-submit the proposal after correcting the deficiencies noted by the Administrator or reconsidering any area designation determined by the Administrator to be arbitrary and capricious.
- (d) Review of new sources
- (1) The provisions of this paragraph have been incorporated by reference into the applicable implementation plans for various States, as provided in Subparts B through DDD of this part. Where this paragraph is so incorporated, the requirements of this paragraph apply to any new or modified stationary source of the type identified below which has not commenced construction or modification prior to June 1, 1975 except as specifically provided below. A

source which is modified, but does not increase the amount of sulfur oxides or particulate matter emitted, or is modified to utilize an alternative fuel, or higher sulfur content fuel, shall not be subject to this paragraph.

- (i) Fossil-Fuel Steam Electric Plants of more than 1000 million B.T.U. per hour heat input.
 - (ii) Coal Cleaning Plants.
 - (iii) Kraft Pulp Mills.
 - (iv) Portland Cement Plants.
 - (v) Primary Zinc Smelters.
 - (vi) Iron and Steel Mills.
 - (vii) Primary Aluminum Ore Reduction Plants.
 - (viii) Primary Copper Smelters.
 - (ix) Municipal Incinerators capable of charging more than 250 tons of refuse per 24 hour day.
 - (x) Sulfuric Acid Plants.
 - (xi) Petroleum Refineries.
 - (xii) Lime Plants.
 - (xiii) Phosphate Rock Processing Plants.
 - (xiv) By-Product Coke Oven Batteries.
 - (xv) Sulfur Recovery Plants.
 - (xvi) Carbon Black Plants (furnace process).
 - (xvii) Primary Lead Smelters.
 - (xviii) Fuel Conversion Plants.
 - (xix) Ferroalloy production facilities commencing construction after October 5, 1975.
- (2) No owner or operator shall commence construction or modification of a source subject to this paragraph unless the Administrator determines that, on the basis of information submitted pursuant to subparagraph (3) of this paragraph:

- (i) The effect on air quality concentration of the source or modified source, in conjunction with the effects of growth and reduction in emissions after January 1, 1975, of other sources in the area affected by the proposed source, will not violate the air quality increments applicable in the area where the source will be located nor the air quality increments applicable in any other areas. The analysis of emissions growth and reduction after January 1, 1975, of other sources in the areas affected by the proposed source shall include all new and modified sources granted approval to construct pursuant to this paragraph; reduction in emissions from existing sources which contributed to air quality during all or part of 1974; and general commercial, residential, industrial, and other sources of emissions growth not exempted by paragraph (c) (2) (iii) of this section which has occurred since January 1, 1975.
- (ii) The new or modified source will meet an emission limit, to be specified by the Administrator as a condition to approval, which represents that level of emission reduction which would be achieved by the application of best available control technology, as defined in 52.01 (f), for particulate matter and sulfur dioxide. If the Administrator determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an emission standard infeasible, he may instead prescribe a design or equipment standard requiring the application of best available control technology. Such standard shall to the degree possible set forth the emission reductions achievable by implementation of such design or equipment, and shall provide for compliance by means which achieve equivalent results.
- (iii) With respect to modified sources, the requirements of subparagraph (2) (ii) of this paragraph shall be applicable only to the facility or facilities from which emissions are increased.
- (3) In making the determinations required by paragraph (d) (2) of this section, the Administrator shall, as a minimum, require the owner or operator of the source subject to this paragraph to submit: site information, plans, description, specifications, and drawings showing the design of the source; information necessary to determine the impact that the construction or modification will have on sulfur dioxide and particulate matter air quality levels; and any other information necessary to determine that best available control technology will be applied. Upon request of the Administrator, the owner or operator of the source shall provide information on the nature and extent of general commercial, residential, industrial, and other growth which has occurred in the area affected by the source's emissions (such area to be specified by the

Administrator) since January 1, 1975.

- (4) (i) Where a new or modified source is located on Federal Lands, such source shall be subject to the procedures set forth in paragraphs (d) and (e) of this section. Such procedures shall be in addition to applicable procedures conducted by the Federal Land Manager for administration and protection of the affected Federal Lands. Where feasible, the Administrator will coordinate his review and hearings with the Federal Land Manager to avoid duplicate administrative procedures.
 - (ii) New or modified sources which are located on Indian Reservations shall be subject to procedures set forth in paragraphs (d) and (e) of this section. Such procedures shall be administered by the Administrator in cooperation with the Secretary of the Interior with respect to lands over which the State has not assumed jurisdiction under other laws.
 - (iii) Whenever any new or modified source is subject to action by a Federal Agency which might necessitate preparation of an environmental impact statement pursuant to the National Environmental Policy Act (42 U.S.C. 4321), review by the Administrator conducted pursuant to this paragraph shall be coordinated with the broad environmental reviews under that Act, to the maximum extent feasible and reasonable.
- (5) Where an owner or operator has applied for permission to construct or modify pursuant to this paragraph and the proposed source would be located in an area which has been proposed for redesignation to a more stringent class (or the State, Indian Governing Body, or Federal Land Manager has announced such consideration), approval shall not be granted until the Administrator has acted on the proposed redesignation.

(e) Procedures for public participation

- (1) (i) Within 20 days after receipt of an application to construct, or any addition to such application, the Administrator shall advise the owner or operator of any deficiency in the information submitted in support of the application. In the event of such a deficiency, the date of receipt of the application for the purpose of paragraph (e) (1) (ii) of this section shall be the date on which all required information is received by the Administrator.
- (ii) Within 30 days after receipt of a complete application, the Administrator shall:

- (a) Make a preliminary determination whether the source should be approved, approved with conditions, or disapproved.
 - (b) Make available in at least one location in each region in which the proposed source would be constructed, a copy of all materials submitted by the owner or operator, a copy of the Administrator's preliminary determination and a copy or summary of other materials, if any, considered by the Administrator in making his preliminary determination; and
 - (c) Notify the public, by prominent advertisement in newspaper of general circulation in each region in which the proposed source would be constructed, of the opportunity for written public comment on the information submitted by the owner or operator and the Administrator's preliminary determination on the approvability of the source.
- (iii) A copy of the notice required pursuant to this subparagraph shall be sent to the applicant and to officials and agencies having cognizance over the locations where the source will be situated as follows: State and local air pollution control agencies, the chief executive of the city and county; any comprehensive regional land use planning agency; and any State, Federal Land Manager or Indian Governing Body whose lands will be significantly affected by the source's emissions.
- (iv) Public comments submitted in writing within 30 days after the date such information is made available shall be considered by the Administrator in making his final decision on the application. No later than 10 days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Administrator shall consider the applicant's response in making his final decision. All comments shall be made available for public inspection in at least one location in the region in which the source would be located.
- (v) The Administrator shall take final action on an application within 30 days after the close of the public comment period. The Administrator shall notify the applicant in writing of his approval, conditional approval, or denial of the application, and shall set forth his reasons for conditional approval or denial. Such notification shall be made available for public inspection in at least one location in the region in which the source would be located.

- (vi) The Administrator may extend each of the time periods specified in paragraph (e) (1) (ii), (iv), or (v) of this section by no more than 30 days or such other period as agreed to by the applicant and the Administrator.
 - (2) Any owner or operator who constructs, modifies, or operates a stationary source not in accordance with the application, as approved and conditioned by the Administrator, or any owner or operator of a stationary source subject to this paragraph who commences construction or modification after June 1, 1975, without applying for and receiving approval hereunder, shall be subject to enforcement action under section 113 of the Act.
 - (3) Approval to construct or modify shall become invalid if construction or expansion is not commenced within 18 months after receipt of such approval or if construction is discontinued for a period of 18 months or more. The Administrator may extend such time period upon a satisfactory showing that an extension is justified.
 - (4) Approval to construct or modify shall not relieve any owner or operator of the responsibility to comply with the control strategy and all local, State, and Federal regulations which are part of the applicable State Implementation Plan.
- (f) Delegation of authority
- (1) The Administrator shall have the authority to delegate responsibility for implementing the procedures for conducting source review pursuant to paragraphs (d) and (e), in accordance with subparagraphs (2), (3), and (4) of this paragraph.
 - (2) Where the Administrator delegates the responsibility for implementing the procedures for conducting source review pursuant to this section to any Agency, other than a regional office of the Environmental Protection Agency, the following provisions shall apply:
 - (i) Where the agency designated is not an air pollution control agency, such agency shall consult with the appropriate State and local air pollution control agency prior to making any determination required by paragraph (d) of this section. Similarly, where the agency designated does not have continuing responsibilities for managing land use, such agency shall consult with the appropriate State and local agency which is primarily responsible for managing land use prior to making any determination required by paragraph (d) of this section.
 - (ii) A copy of the notice pursuant to paragraph (e) (1) (ii) (c) of this section shall be sent to the Administrator through the appropriate regional office.

- (3) In accordance with Executive Order 11752, the Administrator's authority for implementing the procedures for conducting source review pursuant to this section shall not be delegated, other than to a regional office of the Environmental Protection Agency, for new or modified sources which are owned or operated by the Federal government or for new or modified sources located on Federal lands; except that, with respect to the latter category, where new or modified sources are constructed or operated on Federal lands pursuant to leasing or other Federal agreements, the Federal land Manager may at his discretion, to the extent permissible under applicable statutes and regulations, require the lessee or permittee to be subject to a designated State or local agency's procedures developed pursuant to paragraphs (d) and (e) of this section.
- (4) The Administrator's authority for implementing the procedures for conducting source review pursuant to this section shall not be re-delegated, other than to a regional office of the Environmental Protection Agency, for new or modified sources which are located on Indian reservations except where the State has assumed jurisdiction over such land under other laws, in which case the Administrator may delegate his authority to the States in accordance with subparagraphs (2), (3), and (4) of this paragraph.

(39 FR 42514, Dec. 5, 1974; 40 FR 2802, Jan. 16, 1975, as amended at 40 FR 24535, June 9, 1975; 40 FR 25005, June 12, 1975; 40 FR 42012, Sept. 10, 1975)